

Volume

#

R0256

BOOK A-256

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Meanders Page _____

PRELIMINARY OATHS OF ASSISTANTS.

WE, _____ and _____
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the
chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that
we will report the true distances to all notable objects, and the true lengths of all lines that we assist in
measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of

, Chainman.

, Chainman.

Subscribed and sworn to before me this _____ }
day of _____, 189 }



WE, _____ and _____
do solemnly swear that we will well and truly perform the duties of moundmen in the establishment
of corners, according to the instructions given us, to the best of our skill and ability, in the survey of

, Moundman.

, Moundman.

Subscribed and sworn to before me this _____ }
day of _____, 189 }



WE, _____ and _____
do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners
and other duties, according to instructions given us, to the best of our skill and ability, in the survey of

, Axman.

, Axman.

Subscribed and sworn to before me this _____ }
day of _____, 189 }



I, _____, do solemnly swear that I will well and truly
perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the
survey of _____

, Flagman.

Subscribed and sworn to before me this _____ }
day of _____, 189 }



BOOK A-256

INDEX DIAGRAM.

Township 10 S., Range 2 E.

PRELIMINARY OATHS OF ASSISTANTS.

WE, and do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain over even and uneven ground, and plumb the tally pins, either by striking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of

....., Chainman.

....., Chainman.

Subscribed and sworn to before me this }
day of , 180 }



WE, and do solemnly swear that we will well and truly perform the duties of triangulators in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of

....., Surveyor.

....., Surveyor.

Subscribed and sworn to before me this }
day of , 180 }



WE, and do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey of

....., Axman.

....., Axman.

Subscribed and sworn to before me this }
day of , 180 }



I, , do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of

....., Flagman.

Subscribed and sworn to before me this }
day of , 180 }



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PRELIMINARY OATHS OF ASSISTANTS.

WE, and
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of

, Chainman.

, Chainman.

Subscribed and sworn to before me this }
day of , 189 }



WE, and
do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of

, Moundman.

, Moundman.

Subscribed and sworn to before me this }
day of , 189 }



WE, and
do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey of

, Axman.

, Axman.

Subscribed and sworn to before me this }
day of , 189 }



I, , do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of

, Flagman.

Subscribed and sworn to before me this }
day of , 189 }



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PRELIMINARY OATHS OF ASSISTANTS.

WE, _____ and _____ do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of _____

, Chainman.

, Chainman.

Subscribed and sworn to before me this _____
day of _____, 189 }



WE, _____ and _____ do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of _____

, Moundman.

, Moundman.

Subscribed and sworn to before me this _____
day of _____, 189 }



WE, _____ and _____ do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey of _____

, Axman.

, Axman.

Subscribed and sworn to before me this _____
day of _____, 189 }



I, _____, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of _____

, Flagman.

Subscribed and sworn to before me this _____
day of _____, 189 }



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PRELIMINARY OATHS OF ASSISTANTS.

WE, and
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of

....., Chainman.

....., Chainman.

Subscribed and sworn to before me this }
day of , 189 }



WE, and
do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of

....., Moundman.

....., Moundman.

Subscribed and sworn to before me this }
day of , 189 }



WE, and
do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey of

....., Axman.

....., Axman.

Subscribed and sworn to before me this }
day of , 189 }



I, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of

....., Flagman.

Subscribed and sworn to before me this }
day of , 189 }



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INDEX DIAGRAM.

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PRELIMINARY OATHS OF ASSISTANTS.

WE, _____ and _____
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of

, Chainman.

, Chainman.

Subscribed and sworn to before me this _____
day of _____, 189 }



WE, _____ and _____
do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of

, Moundman.

, Moundman.

Subscribed and sworn to before me this _____
day of _____, 189 }



WE, _____ and _____
do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey of

, Axman.

, Axman.

Subscribed and sworn to before me this _____
day of _____, 189 }



I, _____, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of _____

, Flagman.

Subscribed and sworn to before me this _____
day of _____, 189 }



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PRELIMINARY OATHS OF ASSISTANTS.

We, and do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain over even and uneven ground, and plumb the tally pins, either by stretching or dragging the chain; that we will report the true distances to all notable objects, and the true length of all roads that we make in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the surveying

J. R. Stevenson

J. Brightman

Subscribed and sworn to before me this

day of 189



We, and do solemnly swear that we will well and truly perform the duties of surveyors in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the surveying

J. R. Stevenson

J. Brightman

Subscribed and sworn to before me this

day of 189



We, and do solemnly swear that we will well and truly perform the duties of engineer in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the surveying

J. R. Stevenson

J. Brightman

Subscribed and sworn to before me this

day of 189

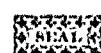


I, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of

J. R. Stevenson

Subscribed and sworn to before me this

day of 189



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PRELIMINARY OATHS OF ASSISTANTS.

WE, and
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of

....., Chainman.

....., Chainman.

Subscribed and sworn to before me this }
day of , 189 }



WE, and
do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of

....., Moundman.

....., Moundman.

Subscribed and sworn to before me this }
day of , 189 }



WE, and
do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey of

....., Axman.

....., Axman.

Subscribed and sworn to before me this }
day of , 189 }



I, , do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of

....., Flagman.

Subscribed and sworn to before me this }
day of , 189 }



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PRELIMINARY OATHS OF ASSISTANTS.

WE, _____ and _____
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the
chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that
we will report the true distances to all notable objects, and the true lengths of all lines that we assist in
measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of

, Chainman.

, Chainman

Subscribed and sworn to before me this _____
day of _____, 189 }



WE, _____ and _____
do solemnly swear that we will well and truly perform the duties of moundmen in the establishment
of corners, according to the instructions given us, to the best of our skill and ability, in the survey of

, Moundman

, Moundman

Subscribed and sworn to before me this _____
day of _____, 189 }



WE, _____ and _____
do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners
and other duties, according to instructions given us, to the best of our skill and ability, in the survey of

, Axman

, Axman

Subscribed and sworn to before me this _____
day of _____, 189 }



I, _____, do solemnly swear that I will well and truly
perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the
survey of _____

, Flagman

Subscribed and sworn to before me this _____
day of _____, 189 }



BOOK A-256

FIELD NOTES

R. J. B.

OF THE SURVEY OF

*Second Standard Parallel South**through**Range 2 East*

Of the Salt Lake Base and Meridian,

Utah

AS SURVEYED BY

A. P. Hansen, United States Deputy Surveyor,Under his Contract No. 220, dated *April 1*, 1898Survey commenced *September 20*, 1898Survey completed *September 23*, 1898

6-161

Standard fee \$6.00-00 ✓

Names and Duties of Assistants.

Thomas E. Lyons Chairman

Norman Oklanded

Henry E. Giers

Krups. Butterfield

Norman Oklanded Manager

Henry E. Giers

John Gardell Axman

W. J. Jarvis "

John Gardell Flagman

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Meanders Page.....

Preliminary Oaths of Assistants.

WE, Thomas C. Hayes, N. E. Giers, Harmon Thander, and Henry Butterfield, do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of

The Second Standard Parallel South through Range 2 East of the 5th Mer.

Thomas C. Hayes, Chainman.

Harmon Thander, Chainman.

Subscribed and sworn to before me this 20th day of September, 1898

SEAL

{ Henry E. Giers chainman

Henry Butterfield chainman

Thomas D. Keele's, Notary Public

My commission expires December 31st

WE, Harmon Thander and Henry E. Giers, do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of

The Second Standard Parallel South through Range 2 East of the 5th Mer.

Harmon Thander, Moundman.

Henry E. Giers, Moundman.

Subscribed and sworn to before me this 20th day of September, 1898

SEAL

{ Thomas D. Keele's

Notary Public

My commission expires December 31st

WE, John Gardell and W. J. Jarvis, do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey of

The Second Standard Parallel South through Range 2 East of the 5th Mer.

John Gardell, Axman.

W. J. Jarvis, Axman.

Subscribed and sworn to before me this 20th day of September, 1898

SEAL

{ Thomas D. Keele's

Notary Public

My commission expires December 31st

I, John Gardell, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of

The Second Standard Parallel South through Range 2 East of the 5th Mer.

John Gardell, Flagman.

Subscribed and sworn to before me this 20th day of September, 1898

SEAL

{ Thomas D. Keele's

Notary Public

My commission expires December 31st

Second Standard Parallel South through Range 2 East

Chains	<p>Survey commenced September 20, 1898 and executed with a N & L E Gurley light meridian transit with solar attachment. — The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc which is also the least count of the vernier of the latitude and declination axes. —</p> <p>The instrument was examined tested on the true Meridian at Salt Lake, found correct and was approved by the surveyor general for Utah Aug 23 1898</p> <p>I begin at the standard cor. of Tp 105 R.S 1 and 2 E in Latitude $39^{\circ}54'$ N longitude $111^{\circ}47'$ W. which is a stone firmly set marked and witnessed as described by the surveyor general. —</p> <p>In order to test the solar apparatus by comparing the results of observations on the sun made during a.m. and p.m. hours with a true meridian determined by observations on Polaris I proceed as follows. —</p> <p>At $4^{\text{th}} 20^{\text{m}}$ p.m. local mean time I set off $39^{\circ}54'$ on the lat. arc $0^{\circ}50'$ N. on the decl. arc. and mark the true meridian thus determined with the solar on a stake firmly set in the ground 4.50 chs N. of the instrument. —</p> <p>At $7^{\text{th}} 27^{\text{m}}$ p.m. local mean time I observed Polaris at eastern elongation in accordance with instructions in the manual and mark the line thus determined by an iron pin set firmly in the ground 4.50 chs N. of the instrument. —</p> <p style="text-align: right;">Sept. 20, 1898</p> <hr/> <p>September 21, at $7^{\text{th}} 45^{\text{m}}$ a.m. local mean time I lay off the azimuth of Polaris $1^{\circ}37'$ to the west and mark the true meridian thus determined by a nail driven in the stake set last evening on which the true meridian falls 0.4 ins. east of the mark determined by the solar. —</p> <p>At 8th 00 a.m. I set off $39^{\circ}54'$ on the lat. arc. $0^{\circ}34'$ N. on the decl. arc and mark the true meridian determined by the solar by an iron pin firmly set in the stake at 4.50 chs. N. of my station this mark falls 0.3 ins. east of the true</p>
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Second Standard Parallel South through Range 2 East

	Chain	meridian established by Polaris observation. — The solar appearance by pm and am. observation therefore defines position for true meridian having less than 1° error as compared with the true meridians established by Polaris observation and I. therefore consider the adjustment of the instrument sufficiently accurate. The magnetic bearing of the true meridian at 8400 m. is in $16^{\circ} 14' W$; the angle thus determined reduced by the table page 100 gives the mean mag. decl. $16^{\circ} 11' E$ From the standard corr. above described Or. run East on S. bdy. rec. 31
		On Mountainous land
4,000		Ascending on very steep, rocky, and broken N. slope; in dense undergrowth and scattering pine timber. — Difference between measurements of 40.00 chs. by two sets of chainmen is 24 chs.; position of middle point By 1st set, 40.12 chs. By 2nd set 39.88 chs.; the mean of which is Set a limestone 24x10x6 in. 18 in. in the ground and mound of stones for standard 1/4 rec. corr. marked S.C. 94 on N. face from which
		A pine tree 12 in. diam. bears N. $22^{\circ} 4' E$ 50 chs. dist. marked S.C. 14 S. 31 B.T.
		A pine tree 9 in. diam. bears N. $90^{\circ} 5' W$ 71 chs. dist. marked S.C. 14 S. 31 B.T.
56,28		Top of sharp rocky ridge course N. and S. about 2500 ft. above start corr.; thin in the main axis of the Mts. Nebo range and extends over a nearly straight, unbroken course S. to the peaks of Mt. Nebo — on the north it breaks abruptly within a mile to Santquin Canon and Utah valley. — Begin abrupt descent on E. slope
69,50		Descent becomes less steep; enter pine and aspen timber. course N. and S.
		Difference between measurements of 8000 chs. by two sets of chainmen is 20 chs.; position of middle point By 1st set 80.10 chs.
80,00		By 2nd set 79.90 chs. the mean of which is Set a limestone 18x10x8 in. 12 in. in the ground for standard corr. of recs. 31 and 32 marked S.C. on N. with 1 groove on N. and 5 grooves on E. face from which

Second Standard Parallel South through Range 2 East

chains.	<p>A pine tree 13 in. diam. bears N 62° 45' W 16' elev. marked T.10 S.R.2 E. S.31 S.C. B.T.</p> <p>A pine tree 11 in. diam. bears N 37° 15' E 25' elev. marked T.10 S.R.2 E. S.32 S.C.B.T.</p> <p>Raised a mound of stones 2 ft base 15 ft high N. of cor. This cor is 800 ft below top of mountain Land Mountainous, high and very rugged Soil rocky</p> <p>Timbered pine of fair size and small aspens. Undergrowth aspen brake and thorn Mountainous land 8900 chs. -</p> <p>Sep 21: at this cor. 6 sec off 0° 29' N on the decl. arc and at 11^h 53^m a.m. Z.m.t. observe the sun on the meridian the resulting lat. is 39° 54' N</p>
	<p>East on S. decl. sec. 32</p> <p>On Mountainous land</p> <p>Descending through heavy pine and aspen timbered</p>
22.00	Drag road bears S.W. and S.E.
23.00	Dry wash in hollow course N
27.80	Drag road bears S.W. and S.E.
39.00	Begin abrupt descent N and S to
39.97	Channel of Water Hollow creek between steep banks 100 ft high course N.
	Difference between measurements of 4000 chs by two sets of chainmen is 12 chs.; position of middle point By 1st set 40.06 chs.
	By 2nd set 39.94 chs. the mean of which is
40.00	A limestone boulder 3 x 3 x 2 1/2 ft above ground for standard 1/4 sec. cor. marked. S.C. 1/4 on N. face from which a point on the smooth limestone side of channel 3 ft above bottom having a slope of about 50°, marked S.C. 1/4 B.O. bears N 44° 15' W 13' elev
	A point on east side of channel similar to the last described, marked S.C. 1/4 B.O. bears N 89° 50' E. 9' elev
40.01	Stream of Water Hollow Creek 2 chs wide course N.
40.08	Leave creek bottom and begin abrupt ascend
42.25	Top of creek channel 90 ft high, sloping N.
	Begin descent on broken slope N.E. in small aspen timber and dense brush. -
51.90	Drag road bears N 20° E and S.W. in bottom of hollow

Second Standard Parallel South through Range 2 East

chain.	draining N. Begin gradual and broken ascent.
68.00	Top of spur N 200 ft high Begin descent in dense aspen brake and brush Difference between measurements of 80.00 chs. by two sets of chains is 28 chs. position of middle point By 1st set 80.14 chs.
	By 2nd set 79.86 chs. the mean of which is
80.00	Set w. limestone 24 x 10 x 8 ins. 18 ins in the ground for Standard cor. of sec. 32 and 33 marked S.C. on N. with 2 groves on W and 4 groves on E. faces; raised a mound of stones 2 ft base 1/2 ft high N. of cor. Site impracticable.-
	Land mountainous very broken
	Soil gravelly and rocky 3rd rate
	Timber pine of fair size and small aspen on first 1/2 mile balance dense aspen of small size and thorn brush.-
	Mountainous land 80.00 chs.-
	East on S. bdy. sec. 33.
	On mountainous land
	Descending in aspen brake and dense brush
8.80	Stream 6 chs. wide from S.W. turns E
9.00	Leave stream turns N. in hollow
	Begin ascent
13.60	Top of spur at 60 ft high
	Descending to
15.86	Stream 2 chs. wide drains N. in hollow
	Ascending to
17.20	Top of spur N. and beginning of steep descent
21.27	Summit creek 14 chs. wide in bottom of Santaguine Canon swift current, and pure water, course N.W. - Below this point the canon is very narrow with perpendicular, rocky walls several hundred feet high; while above it becomes more shallow with gradually sloping sides and only occasionally a broken ledge
22.30	Canon road from Santaguine now washed out and impassable bears N.W. and S.E.
22.60	Begin ascent on steep rocky slope, course N.W. and S.E.
30.00	Top of canon and spur S. 30° E. 700 ft. above creek
37.86	Descent and enter canon timbered

Second Standard Parallel Soddy - through Range 2 East

chain	Difference between measurements of 4000 chs by two sets of chainmen is 22 chs.; position of middle point By 1st set 40.11 chs.
40,00	By 2nd set 39.89 chs the mean of which is Set a sandstone 18x9x7 ins. 12 ins. in the ground for standard. 1/4 sec. cor. marked S.C. 1/4 on N. face. from which A pine tree 5 in diam. bears N 36° 30' E 11 chs marked S.C. 1/4 S. 33. B.T.
	A pine tree 9 in diam. bears N 43° 40' W 19 chs marked S.C. 1/4 S. 33 B.T.
57,20	Ravine 250 ft deep course S. E. and dry wash ascending in scattering timber
57,400	Top of spur S 25° E. and beginning of descent to dry wash in bottom of gulch 200 ft deep course S W
60,10	Beginning ascent in heavy aspen timber. Difference between measurements of 8000 chs by two sets of chainmen is 36 chs.; position of middle point By 1st set 180.18 chs.
80,00	By 2nd set 79.82 chs. the mean of which is Set a limestone 18x10x6 ins. 12 ins. in the ground for standard cor. of secs 33 and 34 marked S.C. on N with 3 grooves on E and W. faces from which an oak tree 5 in. diam bears N 46° 15' W 47 chs. marked T. 10 S. R. 2 E. S. 33 S.C. 1/3. T.
	A pine tree 12 ins. diam bears N 46° 30' E 21 chs. marked T. 10 S. R. 2 E. S. 34 S.C. 1/3. T.
	Land mountainous Soil gravelly and rocky 3 to 6 rods Timber pine and aspen of fair size Mountainous land 8000 chs. -
	September 21 / 1898

September 22. at 8^h 55^m 7. m.t. I set off 39° 5' 4" on
the lat. arc 0° 9' N. on the decl. arc. and determine a
true meridian with the solar at the standard cor. of secs
33 and 34 then I run
East on S. bdy. sec 34
On Mountainous land
Ascending on rolling ground in pine and aspen timber
Top of spur S.W. 200 ft high
Descending to

Second Standard Parallel South through Range 2 East

Chain	
2760	Enter tall aspen timber, bears N and S
3050	Dry wash in bottom of gulch 200 ft deep course SW Begin ascent Difference between measurements of 4,000 cm by two sets of chainmen in 24 elds., position of middle point By 1 st set 40.12 cm.
4000	By 2 nd set 39.88 cm.; the mean of which is Sch a sandstone 18 x 10 x 8 ins. 12 ins. in the ground for standard 1/4 sec. cor. marked S.C. 1/4 on N. face from which An aspen tree 7 ins. diam. bears N 65° 45' E 40 elds. marked S.C. 1/4 S. 34 B.T.
6380	An aspen tree 6 ins. diam. bears N 41° 35' W 11 elds. marked S.C. 1/4 S. 34 B.T. Raised a mound of stones 2 ft base 1 1/2 ft high N. of cor. Ascending even slope in heavy aspen timber Top of ridge bears S.W. and S.E. 350 ft above cor. Beginning descent on steep broken slope; timber changing from aspen to pine Difference between measurements of 80,000 cm. by two sets of chainmen in 16 elds.; position of middle point By 1 st set 80.08 cm.
8000	By 2 nd set 79.92 cm. the mean of which is Sch a sandstone 18 x 9 x 6 ins. 12 ins. in the ground for standard cor. of sec. 34 and 35 marked S.C. on N with 4 grooves on N and 2 grooves on S. fallen from which A pine tree 7 ins. diam. bears N 50° 3' W 51 elds. marked T 10 S 12 E S. 34 S.C. B.T. A pine tree 9 ins. diam. bears N 77° 20' E 11 elds. marked T 10 S 12 E S. 35 S.C. B.T. Raised a mound of stones 2 ft base 1 1/2 ft high N. of cor. Land mountainous very broken Soil gravelly 3 rd rate Timber, aspen and pine mostly of fair size. Mountainous land 6000 cm Sep. 22 at this cor. I set off 0° 6' S. on the deep side and at 11 h 53 m a.m. I met. observed the sun on the meridian the resulting lat. is 39° 54' N
	East on S. by sec. 35

Second Standard Parallel South through Range 2 East

chain	On mountainous land.
	Descending, in pine timber.
5,50	Enter dead, burnt timber bare S.W. and S.E.
2,000	Leave burnt, enter pine timber course N.W. and S.E.
2,610	Dry wash in bottom of gulch 400 ft. below cor., drains S.E.
2,600	Drag road course N.W. and S.E.
	ascending on west slope, timber scattering.
30,35	Top of spur 3,800 ft. high, and beginning of descent.
31,71	Drag road bears N and S in bottom of ravine 60 ft. deep, draining S.
	Begin abrupt ascent.
35,70	Leave timber, bear N and S; enter brush and broken
37,00	Top of spur S. 170 ft. high, and beginning of gradual descent.
	Difference between measurements of 4,000 ch. by two sets of chainmen in 14 hrs.; position of middle point
	By 1st set 39,93 ch.
	By 2nd set 40,07 ch. the mean of which is
4,000	Set at sandstone 18x8x6 in. 12 in. in the ground for standard 94 sec. cor. marked S.C. 1/4 on N. face from which 2 pine trees 6 in. diam. bear N 25° E 66 ft. marked S.C. 1/4 S. 35 B.T.; no other trees within limits.
	Raised a mound of stones 2 ft. bare 1 1/2 ft. high N of cor. Pit impracticable.
43,20	Bottom of ravine 130 ft. deep, drains S.
	Ascending.
48,30	Top of spur S and beginning of descent.
55,12	Wood road N and S. in bottom of gulch.
55,40	Stream 1 lkh. wide draining S.
	Begin ascent in scattering pine and aspen timber.
65,30	Top of spur S. 300 ft. high.
	Descending.
71,78	Dry wash on bottom of gulch 200 ft. deep, draining S.
	Difference between measurements of 8,000 ch. by two sets of chainmen in 20 hrs.; position of middle point.
	By 1st set 79,90 ch.
	By 2nd set 80,10 ch. the mean of which is
8,000	Set at sandstone 18x10x6 in. 12 in. in the ground for standard. cor. of sec. 35 and 36 marked S.C. cor. N with 5 groves on W and 1 groove on E. face from which

Second Standard Parallel South through Range 2, East.

chain an aspen tree 6 in. diam. bears N 70° 50' E 7 chs.
marked 5 19 317 2 6 5, 36 S.C.B.T.
an aspen tree 5 in. diam. bears. N 77° 30' W 61 chs.
marked T 10 S 17 R 2 6 5 35 S.C.B.T.
Land mountainous very broken
soil gravelly 32° 9.8%
Timber aspen and pine mostly of small size and
partly scattering
mountainous land 8,000 chs. —

- East on S ridge sec. 36
on mountainous land
descending in dense brush, and scattering timber
12.75 Top of spur S. and beginning of descent
36.00 Stream 2 chs wide in bottom of gulch 300 ft deep courses.
36.02 Drag road S and S
Begin abrupt ascent, in pine timber, scattering
Difference between measurements of 4,000 chs. by two sets of chainmen in 22 chs.; position of middle point
By 1st set 40.11 chs.
By 2nd set 79.89 chs., the mean of which is
Set a candelabra 18 x 10 x 6 in. 12 in. in the ground
for standard 1/4 sec. cor. marked S.C. 1/4 sec. S. face
from which
A pine tree 6 in. diam. bears N 37° 30' W. 58 chs.
marked S.C. 1/4 S 36 B.T.
A pine tree 20 in. diam. bears N 57° 45' E 180 chs.
marked S.C. 1/4 S 36 B.T.
Raised at mound of stones 2 ft base 1 1/2 ft high S. of cor.
37.50 Top of ridge 200 ft high course N.W. and S.E.
Bog in descent on S.E. slope
Leaves, trees and broken aspen timber
40.00 Wood road course S.W. and S.E.
732.5 Long road bear S 22° E and N 22° W in flat draw 300
ft. below top of ridge, drain 5 22° E
descending gradually, in scattering large pines
742.5 Top of spur 5.00 ft high
descending on S.E. slope
Difference between measurements of 8,000 chs. by two sets
of chainmen in 18 chs., position of middle point:
By 1st set 80.09 chs.

Second Standard Parallel South through Range 2 East

Chain 8,000. By 2nd set 79.91 cm. the mean of which is
Set a sandstone 18 x 10 x 7 ins. 12 ins in the ground
for Standard cov. of Tp. 10 S R.S. 2 and 3 E. marked.
S.C. 10 N on N. 3 E on E and 2 E on W faces with 6 grooves
on N. E. and W. faces from which
A pine tree 30 ins. diam. bears N 52° 00' W. 190 chrs
marked T. 10 S R. 2 E S. 36 S C. 1 T
A pine tree 12 ins. diam. bears N 42° 30' E 28 chrs
marked T. 10 S R. 3 E. S. 31 S. C. 10 T
Raised as mound of stones 2 ft. base 15 ft. high N. of cov.
Land Mountainous very broken
Soil gravelly 3rd rate
Timber aspen and pine mostly small size but
some of the pine large and valuable.
Mountainous land 8,000 chrs -
Sep 22: at the last described S.L. Tp. cov. I set up the
instrument and at 7^h 19^m 15^s a.m. 7. m.t. observed Polaris
at eastern elongation in accordance with instructions
in the manual and mark the line thus determined
by a nail driven in a stake firmly set in the ground
4 chrs. N. of my station

September 22 / 1898

September 23: at 8^h 36^m a.m. 7. m.t. I lay off the
azimuth of Polaris 1° 37' W. the west and mark the
true meridian thus determined by a nail driven
in a stake firmly set in the ground at 4 chrs. N of
the cov.

At 8^h 6^m 2^s a.m. 7. m.t. I set off 39° 5' 4" on the lat. arc
0° 14' S on the decl. arc and mark the true meridian
determined with the solar on the stake previously set
4 chrs N of my station. -

The two meridians thus determined agree without
material error and I therefor consider the solar
apparatus to be in proper adjustment and not
requiring an additional test by pm. observation. -

September 23, 1898

General Description

This line runs over a very abrupt high and broken
mountain range which is the continuation northward of

Second Standard Parallel South through Range 2 East

the Mount Nebo chain, and then across the deep narrow and rocky canon known as Santopine Canon - and its side-gullies and ravines. -

Nearly the entire distance is covered with timber, in part scattering but much of it a dense heavy growth about half of which is pine and spruce valuable for building purposes. - There is also much bracke and undergrowth. -

The township to the north and included in this contract will be fully described in the following survey it is all mountainous and covered with timber. -

The land on the south is very broken, of high elevation and much of it rocky and no part of the adjoining township on the east, is of value for other than summer range for stock and much fine timber of pine and aspen with which nearly the entire surface is covered. -

There is a stone sawmill in sec. 2 T. 11 S. R. 2 E. but no permanent settlers south or east for a long distance. -

Andrew P. Stanford.

U. S. Deputy Surveyor

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Final Oaths of Deputy Surveyor and his Assistants.

LIST OF NAMES.

A list of the names of the individuals employed by Andrew P. Hanson

, United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of The Second Standard Parallel South through Range 2 East of the S.L. Base Meridian showing the respective capacities in which they acted:

Thomas E. Lyones, Chainman.

H. C. Giers, Chainman or moudman.
Kemp Butterfield, Chairman or moudman.
Harmane Chander, Moundman or

Harmane Chander, Moundman.

W. J. Jarvis, Axman.

John Gardell, Axman.

John Gardell, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Andrew P. Hanson

, United States Deputy Surveyor, in surveying all those parts or portions of the Second Standard Parallel South through Range 2 East

of the Utah base and State of Utah, which are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor General for Utah.

Thomas E. Lyones, Chainman.

Henry C. Giers, Chainman or moudman.

Kemp Butterfield, Chairman or moudman.

Harmane Chander, Moundman.

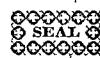
W. J. Jarvis, Axman.

Harmane Chander, Axman.

John Gardell, Flagman or axman.

Subscribed and sworn to before me this 24th

day of October, 1898. }



Thomas P. Hanson

Notary Public

My commission expires December 31st, 1900.

प्राणी विद्युत का उत्तराधि विद्युत का उत्तराधि विद्युत का उत्तराधि विद्युत का उत्तराधि

After the first meeting with members of your delegation, I will have the pleasure of presenting to you the results of our discussions.

André Delhaize
President du jury paritaire.

藏文大藏经

，總務處處長、秘書處處長、高級教員會秘書處處長。

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A HISTORY OF

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BOOK A-256

FIELD NOTES

OF THE SURVEY OF

East BoundaryofTownship No 10 South Range No 2 East

Of the Salt Lake Base and Meridian,

Utah

AS SURVEYED BY

Andrew P. Hanson, United States Deputy Surveyor,

Under his Contract No. 220, dated April 1, 1898

Survey commenced September 23, 1898

Survey completed September 28, 1898

6-161

m. chg 216-
E. 13th - High 6-02-75 ✓

Names and Duties of Assistants.

Thomas E. Lyman - Chairman

Henry E. Ginn

Henry Butterfield - Mandamus

Hannah Olander

John Gardell - Assessor

Hannah Olander

John Gardell - Flagman

BOOK A-256

INDEX DIAGRAM.

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Meanders Page

Preliminary Oaths of Assistants.

WE, Thomas E. Hyons and H. E. Giers

do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of ~~the E. Bdy. of Th. 105 R. 2 E. - S. and W. Bdy. of Th. 39 S.R. 10 W. - S. Bdy. of Th. 39 S.R. 10 W.~~
~~and S. Bdy. of Th. 39 S.R. 11 W. Salt Lake Base and meridian~~

Thomas E. Hyons, Chairman.
Henry E. Giers, Chairman.

Subscribed and sworn to before me this 20th
day of September, 1898 }

SEAL

WE, Kemp Butterfield and Harmon Chamberlain

do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of ~~the E. Bdy. of Th. 105 R. 2 E. - S. and W. Bdy. of Th. 39 S.R. 9 W. - S. Bdy. of Th. 39 S.R. 10 W. S. and W. Bdy. of Th. 39 S.R. 11 W. and S. W. and N. Bdy. of Th. 39 S.R. 11 W. Salt Lake Base and meridian~~

Kemp Butterfield, Moundman.
Harmon Chamberlain, Moundman.

Subscribed and sworn to before me this 20th
day of September, 1898 }

SEAL

WE, John Gardell

do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey of ~~The E. Bdy. of Th. 10 S.R. 2 E. - S. and W. Bdy. of Th. 39 S.R. 9 W. - S. Bdy. of Th. 39 S.R. 10 W. - S. and W. Bdy. of Th. 39 S.R. 11 W. and S. W. and N. Bdy. of Th. 39 S.R. 11 W. Salt Lake Base and meridian~~

John Gardell, Axman.
Harmon Chamberlain, Axman.

Subscribed and sworn to before me this 20th
day of September, 1898 }

SEAL

I, John Gardell

do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of ~~The E. Bdy. of Th. 10 S.R. 2 E. - S. and W. Bdy. of Th. 39 S.R. 9 W. - S. Bdy. of Th. 39 S.R. 10 W. - S. and W. Bdy. of Th. 39 S.R. 11 W. and S. W. and N. Bdy. of Th. 39 S.R. 11 W. Salt Lake Base and meridian~~

John Gardell, Flagman.

Subscribed and sworn to before me this 20th
day of September, 1898 }

SEAL

Thomas B. Peeler
Notary Public
My Commission expires December 31, 1900

East Boundary of Tp. 10 S. R. 2 E.

- chain Survey commenced September 23, 1898 and executed with a W & L E Gurley light mountain transit with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other reading to single minutes which is also the least count of the verniers of the latitude and declination arcs.
- The instrument was examined, tested on the true meridian at Salt Lake found correct and was approved by the Surveyor General for Utah August 23, 1898
- Note For Meridian determination and test of solar apparatus made this day, see end of field notes of Second Standard Parallel South through Range 2 East reference to which is hereby made. (see book 'A')
- I begin at the standard cor. of Tp 10 S R 2 and 3 E which I established September 22, 1898 in connection with the survey of the 2nd SL Par. S. 12 2 E
- Hence I run
- North on a random line along E. bdy of T. 10 S. R. 2 E setting temporary 14 sec. and sec cor. at intervals of 4000 chrs. and at 48° 27' chrs. intersect S. bdy of Tp. 9 S. R. 3 E. at 84 chrs. E of cor. of Tps. 9 and 10 S. R. 2 and 3 E. which is a stone firmly set marked and witnessed as described by the surveyor general.
- The falling answer is a correction of $0^{\circ}6'$ or 14 sec. Expt. mile counting from the N.E. cor. of the Tp. Therefore I run
- $5.0^{\circ}6' E.$ beh. secs. 1 and 6
- On mountainous land
- Ascending on steep N. slope: in timber
- 42,75 A spruce tree 14 ins. diam. for 14 sec. cor. marked 14 S 1 on W. side and 14 S 6 on E. side. from which a spruce tree 8 ins. diam. bears $70^{\circ}0' W.$ 9 chrs. dist. marked 14 S 1 B.T.
- A spruce tree 9 ins. diam. bears $560^{\circ}10' W.$ 13 chrs. dist. marked 14 S 1 B.T.
- 5.4.28 Top of sharp ridge running N 75° W from a high peak in secs. 6 and 7 T. 10 S. R. 3 E. 1600 ft. above Tp. cor. Leafy timber, coarse N.W. and S.E.; under dense brush. Begin descent.
- 5G78 Head of gulch course N.

East Boundary of T. 10 S. R. 2 E

chains 69.00	Ascending to Top of sharp rocky ridge. West from high peak 2000 ft. above top cor. Begin descent.
82.75	Set a limestone 18 x 10 x 7 ins. 12 ins. in the ground for cor. of secs. 1-6-7 and 12 marked with 1 notch on it and 5 notches on S. edges; raised a mound of stones 2 ft. base 1 1/2 ft. high W. of cor. Pile impermeable. This cor. stands 340 ft below top of ridge Land mountainous. Very rugged soil gravelly and rocky 3rd and 4th rate. Timber pine of medium size and growth. Dense oak brush Mountainous land 82.75 chs.

September 23, 1898

6.60	September 24: at 8 ⁴⁵ m a.m., 7 m.t. Set off 39° 59" on the lat. arc 0037' 00" S. on the decl. arc and determine a true meridian with the solar at the cor. of secs. 1-6-7 and 12, thence I find 5.0° 6' E. bet. secs. 7 and 12 On mountainous land Descending on broken slope in dense aspen brush and oak brush Bottom of gulch 130 ft below cor. course 476° W. Begin ascent
11.50	Top of long ridge E and W: sloping W to narrow 100 ft above gulch. Begin descent on broken slope.
40.00	Set a limestone 18 x 9 x 6 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face; from which an oak tree 4 ins. diam. bears 46° 5" W 7 lbs. dist. marked 1/4 S. 12 B.T. An oak tree 4 ins. diam. bears 49° 1.5" E 26 lbs. dist. marked 1/4 S. 7 B.T. Raised a mound of stones 2 ft. base 1 1/2 ft. high W. of cor.
66.50	Bottom of gulch course 3.76° W. 1400 ft. below tip of ridge Begin steep ascent.

East Boundary of T105.R2E

claims

- 76,45 Top of spur S.W. 270 ft high
Begin descent
- 80,00 set at limestone 18 x 10 x 6 in 12 in. in the ground
for cor. of sec. 7-12-13 and 18 marked with 2 red dots
on N. and S. matches on S. edges; raised a mound
of stones 2 ft. base 15 ft high 15.1% cor.
Pits impracticable
Land mountainous very rugged
Soil gravelly and rocky 3 ft. to 10
No timber: dense aspen brake and oak brush
mountainous land 8,000 ac.
-

- 8,06 E. bet. secs. 13 and 18
On mountainous land
Descending on broken slopes: indistinct rock 6-8 ft.
7,60 Old unworked not recently used face N 75° W incl
376° E
- 8,30 Bottom of Payson Creek, a narrow gully 250 ft.
below cor. course N. 80° E
Begin ascent
- 29,50 Top of spur N. 75° W. 10 ft. above bottom of canyon
Begin descent
- 33,05 Stream set at side course N. 85° W. in bottom of
narrow ravine 60 ft. deep
descending gradually on side of ravine
- 36,32 Stream 9 deg. side course N. 85° W. in other part
ravine
Begin ascent: enter scattering timber
- 40,00 set at quartzite stone 18 x 9 x 8 in. 12 in. in the
ground for cor. of sec. 13-18-17 and 18 marked with
2 red dots on N. and S. edges from which
an aspen tree 6 in. diameter, base 4720 ft. tall,
dist. marked T105 R2E S. 15-15-

East Boundary of T. 10 S. R. 2 E.

chains	An aspen tree 6 in. diam. bears N. 32° 20' W. 45 lbs. dist. marked T 10 S 17 2 E S 13 B.T. An aspen tree 7 in. diam. bears S. 10° 40' W. 14 lbs. dist. marked T 10 S 17 2 E S. 24 B.T. An aspen tree 8 in. diam. bears S 16° 01' E. 26 lbs. dist. marked T 10 S. 17 3 E.S. 19 B.T. Raised a mound of stones 2 ft. base 1½ ft. height W. of cor. Land mountainous, broken and rolling Soil gravelly & dry rate Timber aspen and pine, mainly of small size and scattering; dense oak and aspen brush Mountainous land 80,000 chrs. September 24, 1898: at thin cor. I set off 0° 41' 5 on the decl. arc and at 114° 52' a m, I put - observe the sun on the meridian the resulting latitude is 39° 56' 30"
7,07	S. 0° 6' E bch. Secs. 19 and 24 On mountainous land ascending, in timber Top of spur 400 m 150 ft. high Begin descent on gradual slope
17.5-7	Stream 3 hrs. wide course E.W. in bottom of draw
17.8-0	Wood road bears N.W. and S.E. Thence on gradual ascent
40,00	Set a trachyte stone 18 x 13 x 10 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on N.W. face; from which An aspen tree 7 in. diam. bears S. 58° 45' W. 45 lbs. dist. marked 1/4 S. 24 B.T. No other trees within limit Raised a mound of stones 2 ft. base 1½ ft. height W. of cor. Cut impracticable
44,00	Top of spur E. and beginning of gradual descent
57,67	Stream 3 hrs wide course E. in bottom of draw 120 ft. below spur Begin ascent on N. Ex. slope
86,00	Set a quartzite stone 15 x 8 x 6 ins. 12 ins. in the ground for cor. of secs. 19-24-25 and 30 marked with 4 notches on N. and 2 notches on S. edges.

East Boundary of T 10 S R 2 E

chains	from which
	An aspen tree 12 ins. diam. bears $578^{\circ} 00' W$ 6 elev dist. marked T 10 S R 2 E S 25° B.T.
	An aspen tree 10 ins. diam. bears N $31^{\circ} 40' W$ 18 lbs dist. marked T 10 S R 2 E S 24 B.T.
	An aspen tree 10 ins. diam. bears $426^{\circ} 0' E$ 7 elev dist. marked T 10 S R 2 E S 19 B.T.
	An aspen tree 14 ins. diam. bears $5.87^{\circ} 30' E$ 7 lbs dist. marked T 10 S R 2 E S 30 B.T.
	Raised a mound of stones 2 ft. base $1\frac{1}{2}$ ft. high W. of cor.
	Land mountainous rolling, and broken soil gravelly and rocky 3rd rate
	Timber aspen and scattering pine of fair size and close growth. -
	Mountainous land 8,000 chs. -

September 24, 1898

	Rain and snow storm prevented work on September 25 and 26.
	September 27, 1898 (O sun) $5.0^{\circ} 6' E$ bet. sec. 25 and 30
	On mountainous land
3500	ascending gradually, inc timbered Top of ridge bears S. W. and S.E. 300 ft above cor. and, beginning of descent
4000	Set a quartzite stone 18 x 10 x 7 ins. 12 ins. inc the ground for 1/4 sec. cor. marked 1/4 over H. face, from which
	An aspen tree 7 ins. diam. bears $4.80^{\circ} 30' W$. 41 lbs. dist. marked 1/4 S 25 B.T.
	A pine tree 36 ins. diam. bears $N 52^{\circ} 20' E$ 47 lbs. dist. marked 1/4 S 30 B.T.
	Raised a mound of stones 2 ft. base $1\frac{1}{2}$ ft. high W. of cor.
56,00	Wood road bears E and W.
71,00	Dry wash in bottom of gulch 360 ft below top of ridge, course N.W.
	Ascending to
8000	Set a limestone 18 x 9 x 8 ins. 12 ins. in the ground for cor of sec. 25-30-31 and S. E. marked with 5 notches

East Boundary of T 10 S R 2 E.

Chain	<p>on N and 1 notch on S. edges from which An aspen tree 12 in. diam. bears N $53^{\circ} 30'$ E. T. this dish marked T 10 S. R. 3 E 15 30 B.T. A pine tree 10 in. diam. bears N $10^{\circ} 35'$ W. 71 B.T. dish marked T 10 S. R. 2 E 15 25 B.T. An aspen tree 12 in. diam. bears S. $29^{\circ} 45'$ E 65° B.T. dish marked T 10 S. R. 3 E. 8-31 B.T. No other trees within limits. Raised a mound of stones 2 ft. base 14 ft. high N. of cor. Pits impracticable Land mountainous rolling and broken soil gravelly 3rd rate Timber aspen and scattering pine of fair size Mountainous land 8,000 chrs. - September 27, 1898, at this cor. I set off $10^{\circ} 57' S.$ on the steel arc. and at $114^{\circ} 51' W.$ a m. 1.245 t. observed the sun on the meridian: the resulting latitude is $59^{\circ} 55'$.</p>
-------	---

	50° 6' E. bch. sec. 31 and 36
	On mountainous land.
	Ascending on N.E. slope; in dense brush and scattering timber
10,000	Top of spur bears N. $20^{\circ} W.$ 150 ft above cor. Thence on N. slope and gradual ascent
4,000	Set a limestone 18 x 10 x 6 ins. 12 in. in the ground for 1/4 sec. cor. marked 44 on N. face; raised a mound of stones 2 ft. base 14 ft high N. of cor. Pits impracticable
45,700	Top of ridge bears N $15^{\circ} E.$ and S $15^{\circ} W.$ Thence along top of ridge to
63,500	Begin descent on S. slope.
66,700	Leave brush bears E. and W.
67,060	Bottom of gulch crosses S. $60^{\circ} E.$ 300 ft. below top of ridge Begin ascent
75,000	Top of spur E. 120 ft. high Begin descent on S.E. slope
8,000	The standard cor. of Twp. 10 S. R. 2 and 3 E. Land mountainous broken, and rolling Soil gravelly 3rd rate Timber pine and aspen, a few scattering trees

East Boundary of T 10 S R 2 E

chains

Dense aspen brake and oak and cherry brush
Mountainous land 8,000 chs.—

September 27, 1898: at this cor. in order to test
the solar apparatus of my instrument I set off
 $39^{\circ}5'4''$ on the lat. and $1^{\circ}54'8''$ on the decl. and
 $\Delta 3'30''$ from, 2 mts. determined a true meridian
with the solar which I compare with the true
meridian established at this place September 23,
1898 in connection with the survey of the Second
Standard Parallel South Range 2 E. and find the
two meridians thus established to agree within 0°
 $1'$

September 27, 1898

September 28, 1898 at 8:410 a.m., I.M.T. I set off
 $39^{\circ}5'4''$ on the lat. and $2^{\circ}10'5''$ on the decl. and
and compare the true meridian determined
by the solar, with the true meridian established
by observation on Polaris September 23, 1898 in
the survey of 2nd Standard Parallel South Range 2 East
at the standard cor. of Tp 10 S, R 2 and 3 E, and
find the two meridians thus established to
agree without material error and I therefore
consider the solar apparatus to be in proper
adjustment.—

September 28, 1898

Boundaries of T 10 S. R 2 E
Latitude Departures and closing errors

Line designated	True bearing	Distance	Latitude		Departures	
			N.	S.	E.	W.
2nd Standard Par. S. East		480.00			480.00	—
E. bdy.	$N. 0^{\circ} 6' W.$	482.75	482.75	—	—	0.84
N. bdy	$N 89^{\circ} 56' W.$	400.00	0.46	—	—	400.00
" "	$5.88^{\circ} 24' W.$	80.14	—	2.24	—	80.11
W. bdy.	South	158.10	—	158.16	—	—
" "	$S 0^{\circ} 6' E$	322.34	—	322.34	0.56	—
Convergency	—	—	—	—	—	0.60
Total	—	—	483.21	482.74	480.56	481.56
Error in Lat.	—	—	0.47	0.47	0.99	0.99

General Description
For general description of this township see end
of field notes of subdivisions of this township

Andrew P. Hancock

U.S. Land Surveyor

Volume

#

R0256

Final Oaths of Deputy Surveyor and his Assistants.

LIST OF NAMES.

A list of the names of the individuals employed by Andrew P. Lawrence, United States Deputy Surveyor, to assist in running, measuring, and dividing the lines and corners described in the foregoing field notes of the survey of the east boundary of Twp. 10 S. R. 2 E. of the 1st Land Lake Bank & Griswold, Oglethorpe Co. giving the respective capacities in which they acted:

Chairman.

Chairman.

Kenaf Butterfield, Moundman.

Hannover Opender, Moundman.

Axman.

Harrison Roder, Axman.

Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Andrew O'Hanlon

, United States Deputy Surveyor, in surveying all

those parts or portions of the east boundary of The 10 S.R. 2 E.

of the Salt-Lake base
and meridian, State of Utah, which are represented
in the foregoing field notes as having been surveyed by him and under his direction; and that said survey
has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the
corner monuments established, according to the instructions furnished by the United States Surveyor
General for Utah.

Chairman.

Chairman.

Perry Butterfield, Chairman.
Moundman.

Hannah Chenu Moundman.

Axman.

Axman.

Flagman.

Subscribed and sworn to before me this 24th day of October,

day of October, 1898.



Thomas P. Reelis'

Notary Public

My Commission expires December 31st, 1900.

Final Oath of United States Deputy Surveyor.

I, _____, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from _____, United States Surveyor General for _____, bearing date of the _____ day of _____, 189_____, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for _____, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of _____

of the base and _____ meridian, in the _____, of _____, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for _____ and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey; and should any fraud be detected, I will suffer the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

Andrew P. Hanson
United States Deputy Surveyor.

Subscribed by said _____, and sworn to before me this
day of _____, 189_____



APPROVAL.

Office of the United States Surveyor General,

Salt Lake City, Utah, May 5th 1900

The foregoing field notes of the survey of the East Boundary of Township
10 South Range 9 East of the Salt Lake Bas & Archadian Mts

executed by *Andrew P. Hanson*
under his contract No. *220*, dated *April 1st*, 189_____, having been
critically examined, and the necessary corrections and explanations made, the said field notes, and the
surveys they describe, are hereby approved.

Jacob B. Blodow
United States Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in _____, has been correctly copied from the original notes on file in this office.

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BOOK A-256

FIELD NOTES

R.S.B.

OF THE SURVEY OF

Subdivision Lines

of

Township N. 10 South Range 11. 2 East

Of the Salt Lake Base and Meridian,

Utah

AS SURVEYED BY

Andrew P. Hazard, United States Deputy Surveyor,

Under his Contract No. 220, dated April 1, 1898

Survey commenced September 28, 1898

Survey completed October 20, 1898

6-151

Left - Right	m. ch. dm. /
" " "	59-13-77 /
" " "	3-48-1

" " "	1-00-00 /
-------	-----------

W. Pay " "	1-00-14 /
W. " "	3-00-50 /

Preliminary Oaths of Assistants.

WE, Thomas E. Hyors and Nancy E. Giers

do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of Subdivision lines of Tp. 10 S.R. 2 E - Th. 39 S.R. 9 W - Subdivision lines and W. bdy. of Th. 39 S.R. 10 W - Subdivision lines of Th. 38 S.R. 10 W - Th. 39 S.R. 11 W and Th. 39 S.R. 11 E - Salt Lake Base and meridian

Thomas E. Hyors, Chainman.

Nancy E. Giers, Chainman.

Subscribed and sworn to before me this 20
day of September, 1898 }

oooooo
SEAL
oooooo

Thomas B. Heelis

Notary Public

My Commission expires December 31st 1900

WE, Henry Butterfield and Harmon Omander

do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of ~~the~~ Subdivision lines of Th. 10 S.R. 2 E - Th. 39 S.R. 9 W - Th. 38 S.R. 10 W - Subdivision lines and Survey of W. bdy. of Th. 39 S.R. 10 W - Subdivision lines of Th. 39 S.R. 11 W and Th. 38 S.R. 11 E - Salt Lake Base and meridian

Henry Butterfield, Moundman.

Harmon Omander, Moundman.

Subscribed and sworn to before me this 20
day of September, 1898 }

oooooo
SEAL
oooooo

Thomas B. Heelis

Notary Public

My Commission expires December 31st 1900

WE, John Gardell

do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey of ~~the~~ Subdivision lines of Th. 10 S.R. 2 E - Th. 39 S.R. 9 W - Subdivision lines and Survey of W. bdy. of Th. 39 S.R. 10 W - Subdivision lines of Th. 39 S.R. 11 W and Th. 38 S.R. 11 E - Salt Lake Base and meridian

John Gardell, Axman.

Harmon Omander, Axman.

Subscribed and sworn to before me this 20
day of September, 1898 }

oooooo
SEAL
oooooo

Thomas B. Heelis

Notary Public

My Commission expires December 31st 1900

I, John Gardell

do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the Survey of Subdivision lines of Th. 10 S.R. 2 E - Th. 39 S.R. 9 W - Subdivision lines and Survey of W. bdy. of Th. 39 S.R. 10 - Subdivision lines of Th. 39 S.R. 11 W and Th. 38 S.R. 11 E

John Gardell, Flagman.

Subscribed and sworn to before me this 20
day of September, 1898 }

oooooo
SEAL
oooooo

Thomas B. Heelis

Notary Public

My Commission expires December 31st 1900

1-250

Subdivision of T. 10 S. R. 2 E.

chains

Survey commenced September 28, 1898 and executed with a N & L E Gurley light mountain transit with solar attachment -- The horizontal limb is provided with two double vernier placed opposite to each other, reading to single minutes of arc which is also the least count of the verniers of the latitude and declination arcs. -

The instrument was examined tested on the true meridian at Salt Lake, found correct and was approved by the Surveyor general for Utah August 23, 1898. -

For Meridian determinations and test of solar apparatus made this day, reference is hereby made to the field notes of the E. body of this township. — see book B.

At the standard cor. of sec. 35° and 36 T. 10 S. R. 2 E

Lat. $39^{\circ}05'4''N$ Long $111^{\circ}41'W$. at $9^{\circ}52'm$ a.m. 2 mnt. Oct off $39^{\circ}54'$ on the latitude are $2018'$ so the decl. are and determine a true meridian with the solar. -

The magnetic bearing of the true meridian at $10^{\circ}0m$ a.m. is $N 16^{\circ}9'W$, the angle thus determined reduced by the table page 100 gives the mean way. decl. $16^{\circ}8'E$. -

From the last described cor. I run

$N 0^{\circ}1'W$ bet. sec. 35° and 36

On mountainous land

Ascending in aspen and pine timber, on broken ground set a sandstone $18 \times 9 \times 6$ in. 12 in. in the ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on N. face; raised a mound of stones 2 ft base $1\frac{1}{2}$ ft high W. of cor. - It is impracticable

4,680 Top of ridge bears E and W. 6-00 ft high

Begin descent on broken slope to

44,700 Set a quartzite stone $22 \times 14 \times 12$ in. 16 in. in the ground for cor. of sec. 25-26-35° and 36 marked with 1 notch on S and E edges from which

an aspen tree 8 in. diam. bears $S 50^{\circ}40'W 75^{\circ}$ elev. dist. marked T 10 S 12 E S 35° B.T.

An aspen tree 11 in. diam. bears $N 64^{\circ}45'W 90^{\circ}$ elev. dist. marked T 10 S 12 E S 26 B.T.

An aspen tree 7 in. diam. bears $S 62^{\circ}10'E 68^{\circ}$ elev. dist. marked T 10 S 12 E S 36 B.T.

An aspen tree 12 in. diam. bears $N 69^{\circ}40'E 63^{\circ}$ elev. dist. marked T 10 S 12 E S 25 B.T.

Raised a mound of stones 2 ft base $1\frac{1}{2}$ ft high W. of cor.

Preliminary Oaths of Assistants.

WE, Thomas E. Hyrons and Nancy E. Giers

do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of Subdivision lines of Tp. 10 S.R. 2 E - Tp. 39 S.R. 9 W - Subdivision lines and N. bdy. of Tp. 39 S.R. 10 W
Subdivision lines of Tp. 38 S.R. 10 W - Tp. 39 S.R. 11 W and Tp. 39 S.R. 11 E
Salt Lake Base and meridian

Thomas E. Hyrons, Chairman.

Henry E. Giers, Chairman.

Subscribed and sworn to before me this 20th
 day of September, 1898 }

SEAL

Thomas B. Heelis

Notary Public

My Commission expires December 31st 1900

WE, Henry B. Butterfield and Harmon Okander

do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of the
Subdivision lines of Tp. 10 S.R. 2 E - Tp. 39 S.R. 9 W - Tp. 38 S.R. 10 W - Subdivision lines and
Survey of N. bdy. of Tp. 39 S.R. 10 W - Subdivision lines of Tp. 39 S.R. 11 W and Tp. 38 S.R. 11 E
Salt Lake Base and meridian

Henry B. Butterfield, Moundman.

Harmon Okander, Moundman.

Subscribed and sworn to before me this 20th
 day of September, 1898 }

SEAL

Thomas B. Heelis

Notary Public

My Commission expires December 31st 1900

WE, John Gardell and Harmon Okander

do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey of the
Subdivision lines of Tp. 10 S.R. 2 E - Tp. 39 S.R. 9 W - Tp. 38 S.R. 10 W - Subdivision lines and
Survey of N. bdy. of Tp. 39 S.R. 10 W - Subdivision lines of Tp. 39 S.R. 11 W and Tp. 38 S.R. 11 E
Salt Lake Base and meridian

John Gardell, Axman.

Harmon Okander, Axman.

Subscribed and sworn to before me this 20th
 day of September, 1898 }

SEAL

Thomas B. Heelis

Notary Public

My Commission expires December 31st 1900

I, John Gardell

do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the Survey of Subdivision lines of Tp. 10 S.R. 2 E - Tp. 39 S.R. 9 W - Tp. 38 S.R. 10 W - Subdivision lines and
Survey of N. bdy. of Tp. 39 S.R. 10 W - Subdivision lines of Tp. 39 S.R. 11 W and Tp. 38 S.R. 11 E

John Gardell, Flagman.

Subscribed and sworn to before me this 20th
 day of September, 1898 }

SEAL

Thomas B. Heelis

Notary Public

My Commission expires December 31st 1900

1-250

Subdivision of T. 10 S. R. 2 E.

chains

Survey commenced September 28, 1898 and executed with a N & L E Gurley light mountain transit with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc which is also the least count of the verniers of the latitude and declination arcs. —

The instrument was examined tested on the true meridian at Salt Lake, found correct and was approved by the Surveyor general for Utah August 23, 1898. —

For Meridian determinations and list of solar apparatus made this day, reference is hereby made to the fieldnotes of the E. side of this township. — see book B.

Set the standard cor. of sec. 35° and 36 T. 10 S. R. 2 E
Lat. $39^{\circ}0'4''N$ Long $111^{\circ}4'1''W$. at $9^{\circ}52'm$ a.m. 2 mnt. Oct
off $39^{\circ}0'4''$ on the latitude arc $2^{\circ}13'$ on the decl. arc
and determine a true meridian with the solar.

The magnetic bearing of the true meridians at $10^{\circ}40'm$ a.m. in $116^{\circ}9'W$, the angle thus determined reduced by the table page 100 give the mean way.
decl. $16^{\circ}8'E$. —

From the last described cor. I run
 $N.0^{\circ}1'W$ bet. sec. 35° and 36

On mountainous land

Ascending in aspen and pine timber, on broken ground
Set a sandstone 18 x 9 x 6 in. 12 in. in the ground for
1/4 sec. cor. marked 1/4 on N. face, raised a mound of
stones 2 ft base 1 1/2 ft high W. of cor. — It is impracticable

$\pm 4,700$ Top of ridge bears E and W. 600 ft high

Begin descent on broken slope W

$8,000$ Set a quartzite stone 22 x 14 x 12 in. 16 in. in the
ground for cor. of sec. 25-26-35° and 36 marked
with 1 notch on S and E edges from which

an aspen tree 8 in. diam. bears $S 50^{\circ}40'W 75^{\circ}$ lks. dist.
marked T 10 S R 2 E S 35° B.T.

An aspen tree 11 in. diam. bears $N 0^{\circ}40'45''W 90^{\circ}$ lks. dist.
marked T 10 S R 2 E S 26 B.T.

An aspen tree 7 in. diam. bears $S 62^{\circ}10'E$ 68 lks. dist.
marked T 10 S R 2 E S 36 B.T.

An aspen tree 12 in. diam. bears $N 0^{\circ}40'40'E$ 63 lks. dist.
marked T 10 S R 2 E S 26 B.T.

Raised a mound of stones 2 ft base 1 1/2 ft high W. of cor.

Subdivision of T 10 S 17 E

Chains	<p>Land mountainous, and broken soil gravelly 3rd rate Timber aspen, and scattering pine, mostly of small size Mountainous land 80.00 ac.</p> <p>Sep. 28 at this cor. I set off 2°15' S. in the decl. arc and at 11°57'm a.m. 2.m.t. observe the sun on the meridian the resulting latitude is 39°53' N</p>
40.00	<p>East on a random line bet. secs. 25 and 36</p> <p>Set comp. 1/4 sec. cor.</p>
80.00	<p>Intersect E. bdy. of Tp. at cor. of secs. 25-30-31 and 36</p> <p>Thence S. run</p>
	<p>West on a true line bet. secs 25 and 36</p>
	<p>On mountainous land</p>
	<p>Ascending on N.E. slope 10'</p>
260	<p>Top of spur N 150' W 60 ft. high</p> <p>Enter timber, and begin descent</p>
13,80	<p>Dry wash in bottom of gully 200 ft. deep course N 160' W</p> <p>Begin ascent in bracke and timber</p>
17.00	<p>A small spring bears S. 45° E. drain ch. E.</p>
35.13	<p>Old road bear N and S on top of spur N. 300 ft. above gully</p> <p>Descending gradually on broken slope</p>
46.00	<p>Set a Quarries above 18 x 9 x 7 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on N face from which an aspen tree 12 ins. diam. bears N 30° 30' S. 14 links marked 1/4 S. 25° B.T.</p> <p>A pine tree 30 ins. diam. bears N 14° 45' E. 86 links marked 1/4 S. 25° B.T.</p>
41.92	<p>Stream 1 ft. wide drain N. 30° E. in hollow 60 ft. deep ascending</p>
50.14	<p>Woodroad bears N 20° E. and S 20° W</p>
53.50	<p>Top of spur N. 100 ft. high</p> <p>Begin descent</p>
67.00	<p>Dry wash in hollow 100 ft. deep course</p> <p>ascending 10'</p>
70.00	<p>Top of low spur and beginning of descent 15'</p>
73.50	<p>Stream 1 ft. wide course N. in hollow 60 ft. deep ascending</p>
76.50	<p>Top of spur N. and beginning of descent</p>
80.00	<p>The cor. of secs. 26-26-30 and 36</p>

Subdivision of T. 10 S. 12. 2 E.

chain	Land mountainous, rolling, broken soil gravelly and rather Timber aspen and pine of close growth - pine mainly scattering and trees large, aspen mostly medium size and some bracke. - Mountainous land 8,000 chs. -
26,80	N. 0° 11' W. bet. secs 25 and 26 On mountainous land. Descending gradually, in timber Woodland bear E. and W.
31,00	A pond 2 ft. dia. bears N. about 3 chs.
40,00	Set a quartzite stone 18 x 13 x 5 ins. 12 ins. in the ground for cor. all, cor. marked 14 on W. face from which A pine tree 14 ins. diam. bears N. 36° 50' E. 10 chs dist marked 14.5 26 13.T.
	A pine tree 10 ins. diam. bears N. 0° 40' W 11 chs dist. marked 14.5 26 13.T.
	Raised as mound of stones 2 ft base 1½ ft high N. of cor. -
48,36	Dry wash in gulch 60 ft deep course N 25° W Thence on steep rocky W slope
50,00	Set a limestone 15 x 12 x 8 ins. 12 ins. in the ground for cor. of secs. 23-24-25 and 26 marked with 2 notches on S. and 1 notch on E. edges from which an oak tree 10 ins. diam. bears N. 48° 5' W. 11 chs. dist. marked T. 10 S. 12. 2 E. S. 2 8 13.T.
	No other trees of proper size within limit
	Raised as mound of stones 2 ft base 1½ ft high N. of cor. Pitt infallible
	Land mountainous, broken soil gravelly and rocky and rather Timber aspen and pine, mostly scattering and of small size -
	Mountainous land 8,000 chs.
	September 28, 1898

September 29, 1898

40,00	East on a random line bet. secs 24 and 25 -
80,10	Set limb. 14 sec. cor.

Intersect E. bdy. at cor. of secs. 19-24-25 and 30

Subdivision of T 10 S. R. 2 E.

	chains	Thence down West on a true line bet. secs. 24 and 25 On mountainous land Ascending in aspen timber
	28.00	Top of ridge 300 ft high course N 10° W and S.E. Begin descent on steep slope
	49.00	Leave timber bear N and S and enter tall brush and scattered trees Set a limestone 18 x 12 x 6 in., 12 in. in the ground for 1/4 sec. cor. marked 1/4 on W. face; from which an aspen tree 6 in. diam. bears N 7° 30' W 36 ft. dist. marked 1/4 S 24 B.T.
		An aspen tree 7 in. diam. bears S 31° W 30 ft. dist. marked 1/4 S 26 B.T.
	66.20	Dry wash in rocky gulch 500 ft. below top of ridge course N 20° W
		Begin steep ascent in scattering pine timber
	67.50	Top of ridge 3.25 ft high bear N and S
		Descending abrupt rocky slope
	78.25	Perpendicular limestone ledge 20 ft high bears N and S. Enter brush and bracke
	80.10	The cor. of secs. 23-24-25 and 26 Land Mountainous Very broken Soil gravelly and rocky 3rd rate Timber aspen and scattering pine of fair size, and aspen bracke and thorn -- Mountainous land 80/10 chrs. -
		N 0° 1' W bet. secs. 23 and 24
		On mountainous land
		Descending gradually on N.W. slope in thick timber
	40.00	Set a quartzite stone 18 x 10 x 4 in., 12 in. in the ground for 1/4 sec. cor. marked 1/4 on W. face from which A pine tree 9 in. diam. bears N 60° 31' E 111 ft. dist. marked 1/4 S 24 B.T.
		An oak tree 6 in. diam. bears N 60° 35' W. 33 ft. dist. marked 1/4 S 23 B.T.
	80.00	Raised a mound of stones 2 ft. base 1 1/2 ft high W. of cor. Set a quartzite stone 18 x 10 x 4 in., 12 in. in the ground for cor. of secs. 13-14-23 and 24 marked with 3 notches on S, and 1 notch on E. edges from which An oak tree 6 in. diam. bears S 24° 56' W. 76 ft. dist.

Subdivision of T 10 S R 2 E

chains	<p>marked T 10 S R 2 E S 23 B.T.</p> <p>no other trees of proper size within limit</p> <p>Raised as mound of stones 2 ft base 1½ ft high N. of cor Pits impracticable--</p> <p>Land Mountainous rolling and broken</p> <p>soil gravelly and rocky 3rd rate</p> <p>Timber, aspen, maple Oak, and scattering pine - dense growth but mostly small size. On N. 20 chrs mainly oak and maple brush.—</p> <p>Mountainous land 8,000 chrs.</p> <p>Schlämmer 29: at this cor. I set off $2^{\circ} 38' 00''$ S on the decl. arc and at 11^h 50^m A.M. 7 m.t. observe the sun on the meridian the resulting lat. is $39^{\circ} 56' N$</p>
40,00	<p>East on a random line bet. secs. 13 and 24</p> <p>Set line ¼ sec. cor.</p>
50,00	<p>Intersect E. bdy of Tp. at 20 chrs S of cor of secs. 13-18- 19 and 24.</p> <p>Thence S run</p> <p>$589057' N$ on a line bet. secs 13 and 24</p> <p>On mountainous land</p> <p>Descending gradually on N. W. slope in timber and brush</p>
13,60	<p>Wood road bear N.W. and S.E. in bottom of gulch 60ft deep</p>
13,90	<p>Stream 3 chrs. wide course N.W.</p> <p>Begin ascend in broken talus</p>
40,00	<p>Set a quartzite stone 18×10×5 ins. 12 ins. in the ground for ¼ sec. cor. marked ¼ on N. face; raised as mound of stones 2 ft base 1½ ft high N. of cor. Pits impracticable</p>
47,00	<p>Top of spur N.W. and beginning of descent</p>
68,10	<p>Stream 5 chrs wide in narrow gulch 100 ft deep course N.W.</p>
.	<p>Ascending W</p>
77,65	<p>Top of spur N.W. and begin descent</p>
80,00	<p>The cor of secs. 13-14-23 and 24</p> <p>This cor stands 300 ft below cor of secs 13-18-19 and 21- Land mountainous broken and rolling</p> <p>Soil gravelly 3rd rate</p> <p>Timber aspen, maple, oak and scattering pine</p>

Subdivision of T 10 S R 2 E

chains	mainly of small size and no commercial value Mountain land 80,000 acs. -
	Sep. 29: at this cor. I set off 39° 5' 6" N. of the lat. arc 2040' S on the decl. arc and at 24° 32' W. N. I. set t. determine a true meridian with the solar. -
	8° 0' 1" N bet. sec. 13 and 14
	On Mountain land
	Descending in N.W. slope in dense tall oak and maple brush
3,000	Begin steep descent to gulch bears N. W. and S E
16,144	Creek 5 ft. wide swift current course N 30° W. in gulch 100 ft. deep. -
	Ascending abrupt slope to
17,000	Top of gulch and beginning of gradual descent
30,600	Wood road bears S 65° W and N 65° E
40,000	Set a limestone 18 x 9 x 9 in. 12 in. in the ground for 1/4 sec. cor. marked 1/4 on N. face from which a maple tree 4 in. diam. bears S 57° 30' E 57° E decl. marked 1/4 S 13 B.T.
	A maple tree 4 in. diam. bears N 33° 15' W. 27 ft. dist. marked 1/4 S 14 B.T.
	Raised a mound of stones 2 ft base 1 1/2 ft high N. of cor.
43,300	Break to canon bears nearly E. and W.
	Begin abrupt descent
54,000	Head of spring 40 ft. diam. draining S.
	Thence along spring branch
65,000	Peyton Creek 9 in. wide swift current course N. 55° W in bottom of narrow gulch or canon 60 ft. wide break
	Begin ascent
67,000	Drag road parallel with creek
72,000	Tip of spur 8 ft. 200 ft above creek
	Begin abrupt descent
73,700	Ravine 75 ft. deep drain S W. and beginning of ascent on abrupt slope
80,000	Set a limestone 18 x 9 x 9 in. 12 in. in the ground for cor. of secs. 11-12-13 and 14 marked with 4 notches on S and 1 notch on E edges; raised a mound of stones 2 ft base 1 1/2 ft high N. of cor. - Pitt unmarketable thin cor. stone 370 ft above bottom of ravine.

Subdivision of T 10 S R 2 E

chains	<p>Land mountainous very broken soil gravelly and rocky 3rd rate No timber:- Dense high brush of oak and maple the entire distance Mountainous land 80,00 chs. -</p> <p style="text-align: right;">September 29, 1898</p>
40,00	<p>September 30: at the cor. of secs. 11-12-13 and 14 I set off $39^{\circ} 58'$ N on the lat. and $205^{\circ} 7'$ S on the decl. and at $8^{\text{th}} 36'$ a.m., 7 m.t. determine a true meridian with the solar; thence I run $189^{\circ} 51' E$ on a random line bet. secs. 12 and 13</p> <p>Set comp. 1/4 sec. cor.</p>
80,22	<p>Entered E. bdy. of Tp at 22 chs. N of cor of secs. 7-12-13 and 14</p> <p>Thence I run</p> <p>West on a true line bet. secs. 12 and 13</p> <p>On mountainous land</p> <p>Descending on SW slope in dense undergrowth -</p>
20,10	<p>Bottom of gulch 400 ft below cor. course $5.25^{\circ} W$</p> <p>Ascending</p>
38,90	<p>Top of spur $515^{\circ} W$ 200 ft high</p> <p>Beg in descent</p>
40,11	<p>At a quartzite stone 18 x 12 x 6 ins. 12 ins in the ground for 1/4 sec. cor. marked 1/4 on W. face; raised as mound of stones 2 ft high 1 1/2 ft high N of cor. Pits impracticable</p>
54,75	<p>Bottom of gulch 300 ft deep course $515^{\circ} W$.</p> <p>Ascending to</p>
64,60	<p>Top of spur $510^{\circ} W$. and beginning of descent</p>
72,00	<p>Bottom of ravine 160 ft deep course $5. W.$</p> <p>Ascending</p>
77,00	<p>Top of spur $515^{\circ} W$. and beginning of descent</p>
80,22	<p>The cor. of secs. 11-12-13 and 14</p> <p>Land mountainous very broken soil gravelly 3rd rate No timber; dense oak and maple brush 8 to 15 ft high the entire distance. -</p> <p>Mountainous land 80,22 chs</p>

Subdivision of T10S R2E

chain	N 0° 1' W bet. secs. 11 and 12 On mountain land Ascending in dense oak brush on S.W. slope
1000	Head of ravine draining S. 300 ft and beginning of abrupt ascent
36,665	Top of spur S.W. 600 ft above cor. Descending to
40,000	Set a trachyte stone 28 x 10 x 6 in. 20 in. in the ground for 1/4 sec cor. marked 74 on W. face: raised a mound of stones 2 ft base 1 1/2 ft high W. of cor. Pits impracticable. -
44,570	Head of ravine 170 ft deep course S.W. Ascending
77,000	Top of spur W. from high peak in secs. 6 and 7 T.10S R3E 1000 ft above sec. cor. Begin steep descent
86,000	Set a limestone 18 x 10 x 6 in. 12 in. in the ground for cor. of secs. 1-2-11 and 12 marked with 6 notches on S and 1 notch on E. edges: from which A spruce tree 5 in. diam. bears S 47° 2' W 92 class dist marked T10S R2 E. 511 13. T. No other trees within limit Raised a mound of stones 2 ft base 1 1/2 ft high W. of cor. Pits impracticable. - Land mountainous very rugged soil gravelly 3 rd rate No timber; dense oak and wild cherry, and some purple brush Mountain land 80,00 chrs. -
	<u>Note:</u> The sky being overcast during the noon hour I was unable to observe the sun while on the meridian, this day.
	East on a random line bet. secs. 1 and 12
40,000	Set limb. 1/4 sec. cor.
80,06	Intersect E. bdy. of Th. at 12 chrs. S. of cor of secs 1-6-7 and 12 Hence S run S 89° 5' W on a true line bet secs. 1 and 12 On mountainous land Descending on S.W. slope in aspen brake, brush and scattering timber
34,40	Bottom of gulch course N. 76° W 557 ft below cor. Hence on N.W. slope descending gradually

Subdivision of T. 10 S. R. 2 E.

chain

49.03

Set a limestone 18x8x6 ins. 12 ins. in the ground for
1/4 sec. cor. marked 1/4 on N. face: raised a mound
of stones 2 ft base 1 1/2 ft high N. of cor. - Pits impracticable

80.06

The cor. of secs 1-2-11 and 12

Thin cor. stands 850 ft. below cor. of secs 1-6-7 and 12

Land Mountainous very rugged

Soil gravelly and rocky 3rd rate

Timber aspen of small size in bunches - brush underneath:
Mountainous land 80.06 chs. -

40.00

N 0°1' W on a random line bet. secs 1 and 2

Set limb. 1/4 sec. cor.

82.90

Intersect N. bdy. of Tp. 57 ths. E. of cor. of secs. 1-2-35 and
36 which is a stone firmly set marked and estimated
as described by the surveyor general.

Thence I ride

S 0°17' E on a true line bet. secs 1 and 2

On mountainous land

Descending on broken S.W. sloped in scattering
timber and dense brush

35.40

Bottom of ravine 200 ft below cor. drains W.

40.00

Bottom of gulch 290 ft deep covered N 60° W.

Begin ascent

42.90

Set a limestone 18x10x7 ins. 12 ins. in the
ground for 1/4 sec cor. marked 1/4 on W. face:
raised a mound of stones 2 ft base 1 1/2 ft high
W. of cor. - Pits impracticable

56.35

Top of spur N. 75° W 250 ft high

Begin descent to

67.00

Enter aspen timber corner E and W

72.75

Bottom of narrow gulch and dry wash corner

N 80° W. 300 ft below spur

Begin ascent on steep slope

73.00

Leave aspen timber corner E and W. and enter
dense brush

79.30

Leave brush corner E and W.

82.90

The cor. of secs. 1-2-11 and 12

Land mountainous very broken

Soil gravelly and rocky 3rd rate

Timber. aspen of small size and scattering pine trees

Subdivision of T. 10 S. R. 2 E.

chains 17,00 34,50 40,00 54,00 59,00	Pine, oak and cherry brush and aspen brash Mountain land 8290 ft. - September 20, 1898 October 1.; at the standard cor. of sec. 34 and 35. Set off 39° 54' W. from lat. ari. 30° 21' S. on the decl. are and at 84° 28' N. a.m., i. n. t. determine a true meridian with the solar Thence 8 mrs. 11° 0' 1" W. bet. sec. 34 and 35 On mountainous land Descending gradually on E. slope in heavy pine timber Bottom of ravine 157 ft. below st. cor. comes 560° S Begin ascent on broken slope; timber becomes scattering, Top of ascent, and about S.E. 400 ft. above ravine Begin gradual ascent on E. slope; in brush and scattering aspen timber Set a sandstone 18 x 10 x 6 in. 12 in. in the ground for 1/4 sec. cor. marked 1/4 on N. face from which An aspen tree 14 in. diam. bears 54° 37' 34" 9 lbs. dist. marked 1/4 S. 34 B.T. An aspen tree 13 in. diam. bears. 570° 45' E. 24 lbs. dist. marked 1/4 S. 35 B.T. Top of slope N. E. and beginning of descent on E. slope in aspen brash and pine timber Set a limestone 18 x 8 x 6 in. 12 in. in the ground for cor. of sec. 20-27-34 and 35. marked with 1 notch on S and 2 notches on E edges. from which A pine tree 8 in. diam. bears 54° 45' E. 17 lbs. dist. marked T. 10 S. R. 2 E. S. 26 B.T. A pine tree 16 in. diam. bears 5. 12-40' W. 57 lbs. dist. marked T. 10 S. R. 2 E. S. 27 B.T. A pine tree 11 in. diam. bears 54° 5-15' W. 57 lbs. dist. marked T. 10 S. R. 2 E. S. 24 B.T. in this tree within limit. Raised a mound of stones 3 ft. base 12 ft. high st. of cor. Pile imperceptible This are. about 2-3 ft. below top of aspen on E. slope Land mountainous very broken soil gravelly or rock Timber, pine and aspen of fair size, mainly scattering aspen brash and brush
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Subdivision of T 10 S R 2 E

Chains	Mountainous land 8,000 chrs. -
4,000	East on a random line bet. secs 26 and 35 Set limb. 1/4 sec cor.
8,000	Intersect N and S line at cor. of secs. 25-26-34 and 35 Thence S run West on a true line bet. secs. 26 and 35 On mountainous land On broken N slope in dense timber and brake. Dry wash N in hollow
0.25	Dry wash N. in hollow and beginning of ascent Wood road N 25° E and S 25° W on top of spur N
8,40	Descending
12,05	Dry wash in hollow 80 ft deep course N Begin gradual ascent
21,00	Wood road N and S on top of spur N 90 ft high Beginning descent
31,24	At a limestone 18 x 14 x 9 in. 12 in. in the ground for 1/4 sec cor. marked 1/4 on N, face from which An aspen tree 11 in. diam. bears S 36° 44' W 9 chrs old marked 1/4 S 36° 13' T.
40,00	An aspen tree 6 in. diam. bears N 60° 15' E 30 chrs old. marked 1/4 S 26 B.T.; raised a mound of stones 2 ft base 15 ft high S. of cor. -
41,83	Stream 2 chrs. wide course N 15° E. in draw 60 ft deep ascending gradually to
47,25	Wood road bears N 15° E and S 15° W on spur N Descending gradually
50,03	Wash draining N in draw Begin ascent
78,00	Top of spur N 190 ft high, and beginning of descent The cor. of secs. 26-27-34 and 35
8,000	Land Mountainous broken, rolling Soil gravelly sand rate Timber aspen mainly of small size and pine of fair size scattering
	Mountainous land 8,000 chrs. -
	October 1: at this cor I set off 3° 24' S on the decl. arc and at 11450 m a.m., 2 m.t. observed the sun on the meridian the resulting lat is 39° 56' N

Subdivision of T.10 S. R.2 E.

chains	N 0° 1' W. bet secs. 26 and 27 On mountainous land Descending in timber Dry wash N.E. 75 ft below cur. Begin ascent on E slope Top of spur E.; and beginning of descent Dry Wash N.E. Leave wash, turns N. 15° E.; and ascend to Top of spur E. Descending to Wash drains E; hence on E slope descending gradually Set as limestone 18x11x 9 in 12 in in the ground for 1/4 sec. cor. marked 1/4 on N. face from which An aspen tree 6 in. diam. bears S 26° 45' W 24 lbs. dist. marked 1/4 S 27 13 T An aspen tree 7 in. diam. bears S 27° 5' W 27 lbs. dist. marked 1/4 S 27 13 T. Raised as mound of stones 2 ft. base 15 ft high N. of cur. Pits impracticable
55.49	Road from Payson Canon to Santaquin Canon bears S 26° W and N. 25° E
89.00	Set as quartzite stone 18x10x 7 in. 12 in. in the ground for cor. of secs. 22-23-26 and 27 marked with 2 notches on S and E edges from which A maple tree 6 in. diam. bears S 70° 15' W. 94 lbs. dist. marked T 10 S 12 2 E S. 27 13 T. A maple tree 5 in. diam. bears N 42° 30' W. 90 lbs. dist. marked T. 10 S. 12. 2 E. S. 22 13 T. An aspen tree 5 in. diam. bears N 25° 40' E 29 lbs. dist. marked T. 10 S. R. 2 E. S. 23 13 T. no other trees within limit Raised as mound of stones 2 ft. base 15 ft. high N. of cur. Pits impracticable. - Land mountainous Soil gravelly 3rd rate Timber aspen and pine of dense growth but mainly small size. with wreath and brush undergrowth. - Mountainous land 8,000 chrs. -
45.00	East on a random line bet secs. 23 and 26 Set limb. 1/4 sec. cor.
79.80	On west side of line 16 lbs. N of cor. of secs. 23-24-25 and 26

Subdivision of T 10 S 12 E

chain	Thence S run N 89° 5' 3" W on a true line bet. secs 28 and 26 On mountainous land Descending gradually in timber
19,06	Stream older wide course N 23° W in bottom of open gulch 150 ft below cor. Ascending on broken slope Wood road bears N. and S.
29,04	Set a limestone 18 x 10 x 8 in., 12 in., in the ground for 1/4 sec. cor. marked 1/4 on N. face from which An aspen tree 6 in. diam. bears N 25° 45' W 24 lbs. dist. marked 1/4 S 23 13.T.
	An aspen tree 7 in. diam. bears S 27° 5' 6" W 27 lbs. dist. marked 1/4 S 26 13.T.
41,50	Raised a mound of stones 2 ft base 1 1/2 ft height N. of cor. Top of ascent, and. spur N 100 ft. above wash
55,57	Wash in ravine 75 ft. deep, course N Descending gradually N
69,30	Spring branch older wide flow N.
69,50	Begin descent
71,96	Road from Payson Canon to Santaguan canon bears N.E and S.W.
73,46	Dry wash in bottom of gulch 40 ft. deep course N. Begin ascent on steep slope
79,80	The cor. of secs. 22-23-26 and 27 This cor. stands on N & slope 100 ft above wash Land Mountainous, broken, rolling Soil gravelly and rocky 3rd rate Timber aspen of small size, and scattering fine grasses and brush undergrowth Mountainous land 79,80 chm. —

October 1, 1898

	October 3: S run N 00 1' W bet secs. 22 and 23 On mountainous land Descending in dense undergrowth on broken slopes Set a quartzite stone 24 x 10 x 8 in., 18 in., in the ground for 1/4 sec. cor. marked 1/4 on N. face from which An aspen tree 4 in. diam. bears S 30° 45' W 16 lbs. dist. marked 1/4 S 22 13.T. —
40,00	

Subdivision of T 10 S R 2 E

Chains	An aspen tree 4 in. diam. bears $545^{\circ}40' E$ 30' lks dist marked 1/45 23 B.T.
76,52	Old wood road bears N $30^{\circ} W$ and S $30^{\circ} E$
79,00	Enter grove of young pine timber bears N.E. and S.W.
- 80,00	Set a trachyte stone 18x10x9 in., 12 in in the ground for cor. of secs 14-15-22 and 23 marked with 3 notches on S and 2 notches on E edges: from which An aspen tree 6 in. diam. bears $519^{\circ}45' W$ 14 lks. dist marked T 10 S R 2 E S 22 B.T.
	An aspen tree 9 in. diam. bears $4,170^{\circ}6' W$ 12 lks. dist. Marked T 10 S R 2 E S 14 B.T.
	A pine 5 in. diam. bears $409^{\circ}05' E$ 30 lks. dist. marked T 10 S R 2 E S 14 B.T.
	A pine tree 6 in. diam. bears $540^{\circ}50' E$ 41 lks. dist. marked T. 10 S.R.2 E.S. 23 B.T.
	This cor stands 800 ft below cor of secs. 22-23-26 and 27 Land mountainous broken Soil gravelly and rocky 3rd rate Timber aspen bracke and scattering pine of small size, and rank brush and thorn underground Mountainous land 80,00 chr. -
40,00	S $89^{\circ}5'3' E$ on a random line bet. secs 14 and 23 set temp. 1/4 sec. cor.
79,90	Entered N. and S. line at cor. of secs. 13-14-23 and 24 Thence S run N $89^{\circ}5'3' W$. on a tree line bet. secs 14 and 23 On mountainous land
21,30	Descending gradually, in dense oak brush Stream 2 chr. wide flows in bottom of gulch 200 ft. below cor. -
	Begins ascent
36,00	Top of slope, and spur N. and beginning of descent 250 ft above stream
37,27	Road from Sandspur canon to Payson Canon bears $135^{\circ} E$ and S $35^{\circ} W$
89,95	Set a quartzite stone 16x10x8 in., 11 in. in the ground for 1/4 sec. cor. marked 1/4 on its face; raised as mound of stones 2 ft base 1 1/2 ft. high N. of cor. - Pitt impermeable
51,85	Old wood road bears N $30^{\circ} E$ and S $30^{\circ} W$
64,15	Wash in ravine course N. E.

Subdivision of T 10 S R 2 E

chain	Ascending
64.00	Top of ridge 30 ft high bears N and S Begin descent in pine timber bears N and S.
75.00	Dry wash in bottom of gulch 270 ft. below ridge course N 30° W
	Ascending W
79.90	The cor. of secs. 14-16-22 and 23 Land mountainous very broken soil gravelly and rocky 3rd rate. Timber pine, mostly of small size and some aspen Dense undergrowth of oak and maple brush Mountainous land 79.90 chain. — <u>Note:</u> The sky being overcast during the noon hour I was unable to observe the sun while on the meridian this day.
<hr/>	
	N 0° 1' W bet secs. 14 and 15
	On mountainous land
	Descending in pine timber
10.03	Bottom of gulch and dry wash, course N. 30° W 90 ft. below cor. Leads timber, bears N. 30° W and S E and begin ascent in high, dense brush
19.70	Top of spur N.W. 150 ft above wash
	Descending
22.00	Ravine 60 ft deep drains N.W. and beginning of ascent
28.00	Top of spur N.W. 75 ft high
	Descending
31.10	Dry wash in ravine 40 ft deep drains S 60° W Begin ascent
36.00	Enter aspen brash, and brush
40.00	Set a limestone 18 x 9 x 6 in. 12 in. in the ground for 1/4 sec. cor. marked 1/4 on W. face, from which An aspen tree 4 in. diam. bears N 38° 1/2' W 4 ft. dist. marked 1/4 3, 15. P.T.
	An aspen tree 4 in. diam. bears S 38° 0' E. 4 ft. dist. marked 1/4 5 1/4 P.T.
	Raised a mound of stones 2 ft. base 15 ft. high W. of cor. —
55.70	Top of Ridge bears E. and W. 140 ft. high
	Begin steep descent on slope
80.00	Set a beachyite stone 18 x 14 x 6 in. 12 in. in the

Subdivision of T. 10 S. 18 E.

Chain	ground for cor. of secs. 10-11-14 and 15 marked with 4 notches on S. and 2 notches on E. edges from which an aspen tree 4 in. diam. bears S 11° 40' E 19 lbs. dist. marked T 10 S R 2 E S. 14 B.T. a maple tree 4 in. diam. bears S 50° 12' W. 8 lbs. dist. marked T 10 S R 2 E S 15 B.T. an aspen tree 4 in. diam. bears N 47° 35' E. 12 lbs. dist. marked T 10 S R 2 E S. 11 B.T. an aspen tree 4 in. diam. bears N 10° 30' W. 5 lbs. dist. marked T 10 S R 2 E S 10 B.T. This cor. stands on N. slope 450 ft below top of ridge Land mountainous very broken Soil gravelly 3rd rate Timber fine of small size and aspen brake Dense undergrowth of aspen oak and maple Mountainous land 8000 ft
4000	October 3: at the last described cor. at 3425 m p.m., I int. I set off 39° 58' N on the lat. arc. 40° 4' S on the decl. arc. and determine a true meridian with the solar; thence I run S 89° 53' E on a random line bet. secs 11 and 14 Set limb. 1/4 sec. cor.
79,94	Intersect N and S. line 16 lbs S of cor of secs 11-12-13 and 14 Thence I run West on a true line bet. secs. 11 and 14 On mountainous land
12,75	Descending on steep broken S.W. slope in dense brush Candy road from Payson, in bottom of Payson Canyon bears N. and S. - Payson Ck. saw mill bear. t. about 20 chn.
13,50	Payson Creek 20 chs wide swift current clear fine water course N. at 20 chs. below junction of E. and W. Forks Begin ascent
17,25	Span branch 2 chs wide course S. 80° E
39,97	Set a trachyte stone 18x10x6 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face; raised a mound of stones 2 ft base 1 1/2 ft high N. of cor. This impracticable
4000	Top of ascent and spurs N. 700 ft above creek Thence on steep broken N. slope

Subdivision of T 10 S 12 E

chain

79.94

Descending gradually
The cor. of secs. 10-11-14 and 15-
Land mountainous very rugged
Soil gravelly and rocky 3rd rate
No timber.
Dense tall brush of oak, aspen and maple
Mountainous land 79.94 chain. -

X

N. 0° 1' W. betw. secs. 10 and 11

On mountainous land

Descending in dense undergrowth -

23.00

A natural pond, improved by a short dam at lower end
and used as a reservoir, which covers about 2 acres. bears
West about 15° chain. -

40.00

Set a brickstone stone 18x9x7 ins. 12 in. in the ground
for 1/4 acre. cor. marked 1/4 on N face; raised a mound
of stones 2 ft base 1 1/2 ft high W. of cor. - Pitt
impracticable. —

72.95

Payson Creek 16链 wide course N.W. in bottom of
narrow rugged gulch 1000 ft. below sec. cor.
Begin abrupt ascent

76.20

Canyon road to Payson bears N. 20° W.

77.00

Top of spur N. and beginning of descent

79.80

Same road. bears N 15° E

80.00

Set a limestone 26x16x9 ins. 18 in. in the ground
for cor. of secs. 2-3-10 and 11 marked with 5 notches
on S and 2 notches on E. edges; raised a mound
of stones 2 ft. base 1 1/2 ft high W. of cor.. Pitt impracticable

Land Mountainous

Soil gravelly and rocky 3rd rate

Timber a few scattering pine of small size

Dense, tall oak maple and aspen brush

Mountainous land 80.00 dm.

October 3rd 1898

October 4: I run

East on a random line betw. secs. 2 and 11

40.00

Set temp. 1/4 sec. cor.

80.00

Intersect N and S line 5链 N. of cor. of secs. 1-2-11 and 12

Then I run

48° 55' N on a true line betw. secs. 2 and 11

Subdivision of T10S R2E

chain	On mountain land Descending on S. W. slope to Spurs S. W. Thence on N. slope
352	Set a limestone 18 x 9 x 6 in. 12 in. in the ground for 1/4 sec. cor. marked 1/4 on N. face; raised a mound of stones 2 ft. base 1 1/2 ft. high N. of cor. Site impracticable
4000	This cor. stands in the head of a ravine draining S.W. Descending gradually to
4580	Top of sharp rocky spur. S. 30° W and N. 20° E Begin abrupt descent on rocky slope
19,80-	Road to Payson, in Payson canon bears N. 15° E and S. 15° W
- 80,00	The cor. of secs. 2-3-10 and 11 Thin cor. stands 1500 ft below cor. of secs. 1-2-11 and 12 Land mountainous Soil gravelly and rocky. 4th rate. No timber Dense oak and aspen brush Mountainous land 80,000 chs.
	Oct. 4: At 10:410 a.m., I. M. T. I set off 39° 5' N. on the lat. arc. 4° 32'. "S. on the decl. arc and determine a true meridian with the solar at the cor. of secs. 2-3-10 and 11 Thence I run N. 0° 1' W on a random line betw. secs. 2 and 3 4000 Set temp 1/4 sec cor
82,76	Intersect N. bdy. of Tp. - 1 like E. of cor. of secs. 2-3-34 and 35 which is a stone firmly set marked and witnessed as described by the surveyor general Thence I run S. 0° 4' E on a true line betw. secs. 2 and 3 On mountainous land, and through dense undergrowth Over rolling bench land in bottoms of canons, about 125 ft above Payson creek
11,00	Beginning of descent bears E and N. thence over broken hillside sloping W. in dense oak brush
42,76	Set a limestone 18 x 11 x 7 in. 12 in. in the ground for 1/4 sec cor. marked 1/4 on W. face; raised a mound of stones 2 ft. base 1 1/2 ft. high W. of cor. Site impracticable.

Subdivision of T 10 S 18 E

Chains	Thin cor. slabs below the mouth of a rocky ravine from the S.E. in the bottom of Payson Canon and about 100 ft above creek, and beginning of gravel bar east Canon Road, to Payson corner 4.45 and S.E.
7985	
8276	The cor. of secs. 2-3-10 and 11 Land mountainous, broken rolling slopes Soil gravelly 3rd rate covered with a dense growth of oak trees Mountainous land and dense undergrowth 82.76 cor.

October 4, 1898

X

October 5: at 8 ⁴² m.m. I mt. 0 set off 39-54 N.E. the lat. are 40°53': Son the decl. are and determine a true meridian with the solar at the standard cor. of secs. 33 and 34. Then I run N 0°2' W bet. secs. 33 and 34 on mountainous land
Ascending on broken slope in timber
Top of spur S 76° W 150 ft above cor. and beginning of descent
Bottom of gulch and dry wash course S.W., 90 ft. deep
Ascending to
Top of ridge bears S 60° W and N 60° E. 200 ft above cor.
Descending
Set a quartzite stone 24 x 15 x 12 in. 18 in. in the ground for 1/4 acre. cor. marked 1/4 on N. face from which an aspen tree 8 in. diam. bears N 31°36' E 20 ft to dish marked 1/4 S. 34 13 T
An aspen tree 6 in. diam. bears S 67° 45' W. 14 ft to dish marked 1/4 S. 33 13 T.
Wood road bears E and W.
Stream 4. hrs. wide course w. in bottom of gulch 350 ft below tip of ridge
Begin ascent
Top of spur 80 ft high
Descending
Set a sandstone 18 x 10 x 7 in. 12 in. in the ground for cor. of secs. 27-28-33 and 34 marked with 1 notch on S. and 3 notches on E. edges: from which
A Pine tree 40 in. diam. bears S. 3° 25' W 42 ft to dish marked T 10 S R 2 E S. 33 13 T
An aspen tree 12 in. diam. bears S 65° 15' E. 19 ft to dish

Subdivision of T 10 S 12 E

chains	<p>marked T 10 S 12 E S 34 13.T.</p> <p>On pine tree, 30 in. diam. bears N $2^{\circ} 05' E$ 5' ltrs. dist. marked T 10 S 12 E S 27 13.T.</p> <p>An aspen tree 10 in. diam. bears N $37^{\circ} 55' W$ 17 ltrs. dist. marked T 10 S 12 E S 28 13.T</p> <p>Raised or mound of stones 2 ft base 1½ ft high W. of cur.</p> <p>Land mountainous broken</p> <p>Soil gravelly and rate</p> <p>Timber aspen of fair size, and pine mostly scattering - some of the pine trees very large</p> <p>Morainic land 8000 ft.</p>
4000	<p>East on a random line bet sect. 27 and 34</p> <p>Set limb. ¾ rec. cur.</p>
80,06	<p>Entered N and S line at 10 ltrs S of cur of sects. 26-27-34 and 35</p> <p>Thence down</p> <p>S $89^{\circ} 56' W$ on a true line bet. sect. 27 and 34</p> <p>On mountainous land</p> <p>Descending on steep N.W. slope in timber</p>
4.25	Dry wash in open gulch 60 ft deep, course N. $35^{\circ} E$.
9.5-5	Dry wash course N $25^{\circ} E$
16.97	Began gradual ascent on rolling slopes
	Road from Santuario Canyon to Payson Canyon bears N.E. and S.W.
02.30	Top of ridge bears N and S
	Thence on N slope
38.00	Head of gulch N. and beginning of ascent
40,03	Set a brachylo spine 18 x 10 x 9 in. 12 in. in the ground for ¾ rec. cur. marked ¾ on N. face from which
	An aspen tree 8 in. diam. bears S $43^{\circ} 35' E$ 4 ltrs dist. marked ¾ S, 34 13.T.
	An aspen tree 8 in. diam. bears N $81^{\circ} E$ 4 ltrs dist. marked ¾ S. 27 13.T.
47.75	Top of ridge 300 ft above rec. cur. course N.W. and S.E. Begin descent
61.03	Dry wash course N. $60^{\circ} W$. in open gulch 175 ft. below top of ridge
	Thence on N.W. slope descending gradually to
72.15	Road from Santuario Canyon to Payson Canyon bears S $60^{\circ} E$ and N. $15^{\circ} W$.

Subdivision of T. 10 S. 12. 2 E.

chains 80.00	The cor. of secs. 27, 28-33 and 34 Land mountainous rolling, broken Soil gravelly 3 rd rate Timber aspen of dense growth mostly small, and pieces of fair size mainly scattering Mountainous land 8006 chm. - October 5:- at this cor. I set off 4° 57' S on the decl. arc and at 11 ^h 48' a.m. I just observed the sun on the meridian the resulting latitude is 39° 55' N
7.02	N 0° 2' W. bet secs. 27 and 28 on mountainous land Descending in heavy timber Road from Sandspire canon to Payson Canon bears E. and W.
7.75	Bottom of gulch and dry wash course S 70° W Begin ascent
26.00	Leave timber bears E and W
40.00	Set a sandstone 18 x 14 x 10 in. 12 in. in the ground for 1/4 sec. cor. marked 1/4 in W face; raised a mound of stones 2 ft base 1 1/2 ft high W. of cor. - Path impracticable. -
47.50	The Meadow reservoir 3 chm. diam. bears N. 80° 20' W Top of ridge 500 ft. high bears N. 40° W and S. 40° E. Beg in descent
47.65	Entered aspen brakes bears. N W and S E
69.25	Entered heavy timber; leave brake
80.00	Set a sandstone 18 x 12 x 10 in., 12 in. in the ground for cor. of secs. 21-22-27 and 28 marked with 2 notches on S. and 3 on E. edges from which An aspen tree 10 in. diam. bears S 66° 5' W. 34 ft. dist. dist. marked T. 10 S 12. 2 E. S. 28 B.T. An aspen tree 12 in. diam. bears N 45° 15' W. 8 ft. dist. dist. marked T 10 S 12 E. S. 21 B.T. An aspen tree 8 in. diam. bears N 60° 20' E 106 ft. dist. dist. marked T 10 S 12 E S 22 B.T. An aspen tree 6 in. diam. bears S 46° 18' E 28 ft. dist. dist. marked T 10 S 12 E S 27 B.T. Raised a mound of stones 2 ft. base 1 1/2 ft. high W. of cor. -

Subdivision of T 10 S 12 E

chain	<p>Land Mountainous Soil gravelly 3rd rate Timber asper mostly of small size, and pieces of fair size but mainly scattering - Mountain land 8,000 ft. -</p>
4,000	<p>N 89° 56' E. on a random line bet. secs. 22 and 27 Ret. limb. 1/4 sec. cor.</p>
8,000	<p>Intersection N. and S. line at 1/2 dist. of cor. of secs. 22-23-26 and 27 Then N. line N. 89° 59' W. on a tree line bet. secs. 22 and 27 On mountainous land ascending, in dense brush, braké and scattering Timber</p>
11,000	<p>Top of spur N.; and beginning of gradual descent</p>
12,79	<p>Old wood road bears N. and S.</p>
22,00	<p>Beg in abrupt descent N.</p>
23,55	<p>Stream 5 ft. wide comes N. 5° E in narrow gulch 220 ft. deep.</p>
	<p>Begin ascent</p>
35,20	<p>Top of sharp spur N. 240 ft. above creek. - Beg in descent, in fine timber bears. N. and S.</p>
40,00	<p>Set a trachyte stone 18 x 9 x 7 in., 12 in. in the ground for 1/4 sec. cor. marked 1/4 on N. face from which A pine tree 11 in. diam. bears N. 57° 16' E 22 dist. marked 1/4 S 22 B.T.</p>
	<p>A Pine tree 6 in. diam. bears S 73° 40' W. 14 dist. dist. marked 1/4 S 27 B.T.</p>
46,00	<p>Stream 5 ft. wide comes N. in bottom of narrow gulch 300 ft. deep</p>
	<p>Begin ascent on steep slope in burnt timber bears. N. and S</p>
6,000	<p>Leave burnt timber bears N. and S.</p>
8,000	<p>The cor. of secs. 21-22-27 and 28</p>
	<p>This cor. stands 800 ft. above stream</p>
	<p>Land Mountainous very rugged</p>
	<p>Soil gravelly 3rd rate</p>
	<p>Timber fine of good size, and asper</p>

Subdivision of T 10 S R 2 E

Chains	Dense brush and broken Mountainous land 8,000 ft.
	October 6, 1898
5,850	October 6: Sun N. 0° 2' W bet. sec. 21 and 22 On mountainous land Descending, in timber Dry wash in bottom of gulch 90 ft. below cor., course E Begin ascent
12,00	Top of spur E. 120 ft. high, and beginning of descent
26,20	Stream 3 ft. wide in bottom of gulch 200 ft. deep, course N 75° E Ascending broken slope
35,00	Entered aspen, bristle, and scattering pine timber Begin ascent on steep slope
4,000	Set a brachyte stone 18 x 9 x 7 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face: from which A pine tree 11 ins. diam. bears N 6° 7' 15" E 22 lbs. dist. marked 1/4 S 22 B.T. A pine tree 6 ins. diam. bears S 13° 40' W 14 lbs. dist. marked 1/4 S 21 B.T.
	Raised a mound of stones 2 ft. base 15 ft. high st. of cor. -
43,35	Top of spur: about 340 ft. above bottom of gulch. course N. 70° E
	Descending to
65,10	Stream course N 70° E. 3 ft. wide in bottom of narrow gulch 250 ft. below spur Begin steep ascent
8,000	Set a brachyte stone 18 x 10 x 8 ins. 12 ins in the ground for cor. of sec. 16-16-21 and 22 marked 10 s. on N 6 and 2 E on S.E. faces with 3 notches on S. and E. edges from which
	An aspen tree 6 ins. diam. bears S. 45° 45' W. 19 lbs. dist marked T 10 S 17 2 E. S 21 B.T.
	An maple tree 6 ins. diam. bears N 74° 25' W. 5 lbs. dist marked T 10 S. 17 2 E S 16 B.T.
	An aspen tree 5 ins. diam. bears N 27° 14' E 19 lbs. dist. marked T 10 S 17 2 E S 16 B.T.
	An aspen tree 6 ins. diam. bears S 32° 20' E 6 lbs. dist. marked T 10 S 17 2 E. S. 22 B.T.

Subdivision of T 10 S R 2 E

chain	<p>Land mountainous very broken soil gravelly 3rd rate timber, aspens of small size and, pines of fair size but mainly scattering Mountainous land 80,000 acres. -</p>
	<p>October 6: at 9:12 a.m., 2 m.t. I set off $39^{\circ}56'N$ on the lat. arc $5^{\circ}17'S$ on the decl. arc and determined a true meridian with the solar at the last described cor.; thence I run $S 89^{\circ}07'E$ on a random line bet. secs. 15 and 22 40.00 set leinfs. 14 sec. cor. 80.10 Intersect N and S. line 14 ltrs. S. of cor. of secs. 14-16-22 and 23 Thence I run $S 89^{\circ}53'W$ on a tree line bet. secs 15 and 22 On mountainous land ascending in pine timber 2.15 Old road bears $N 30^{\circ}W$ and $S 30^{\circ}E$ Leads timber, bears $N W$ and $S E$, and begins steep ascent in dense, tall brush and broken. - 18.50 Drag road bears $N 20^{\circ}E$ and $S 20^{\circ}W$ on top of spur $N. 30^{\circ} ft.$ above cor. Begin abrupt descent 34.60 Drag road in bottom of gulch coarse sand. 34.82 Creek 5 ltrs. wide comes N. in narrow gulch 400 ft below top of spur Begin steep broken ascent 40.05 Set a brachyte stone 18 x 12 x 9 in. 12 in. in the ground for 14 sec. cor. marked 14 on N. face from which an aspen tree 6 in. diam. bears $N. 33^{\circ} W.$ 2 ltrs. dish marked 14 S 15° B.T. An aspen tree 8 in. diam. bears $S 61^{\circ} 15' E$ 47 ltrs. dish marked 14 S 22 B.T. Raised a mound of stones 2 ft. base 15 ft high N of cor. Top of low spur N.E and beginning of descent to stream 4 ltrs. wide from N. turns $N. 70^{\circ} E$ in ravine 120 ft deep 53.60 Begin abrupt ascent; stream turns S.W. The cor. of secs. 15-16-21 and 22 This cor. stands 600 ft above the creek</p>

Subdivision of T. 10 S.R. 2 E.

chain	<p>Land mountainous, very broken Soil gravelly and rocky 3rd rate Timber fine of small size, and often very dense and mostly braké Dense high brush of maple and thorn Mountainous land 80,10 chrs..</p> <p>Oct. 6: at this cor. I set off 5° 20' S on the decl. are and at 11^h 48^m a.m., I did not observe the sun on the meridian; the resulting latitude is 39° 5' 6" N"</p>
5.20	<p>N. 0° 2' W bet. secs. 15 and 16</p> <p>On Mountainous land</p> <p>Ascending on S.E slope in timber</p>
24.50	<p>Top of spur E. and beginning of descent on abrupt slope Bottom of gulch 500 ft. deep and stream 300 ft. wide course N 60° E</p>
4,000	<p>Beginning ascent of main mountain range between Payette and Santiam Creeks</p> <p>Set a trachyte stone 18 x 8 x 7 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on W face: raised a mound of stones 2 ft. base 1 1/2 ft. high W of cor. Pits impracticable</p>
8,000	<p>Set a limestone 18 x 10 x 6 ins. 12 ins. in the ground for cor. of secs. 9-10-15 and 16 marked with 4 notches on S. and 3 on E. edges: raised a mound of stones 2 ft. base 1 1/2 ft. high W. of cor. Pits impracticable This cor stands on S.E slope 700 ft above bottom of gulch</p> <p>Land mountainous very broken Soil gravelly and rocky 3rd rate Timber; small aspens, mainly braké and a few scattering pine. -</p> <p>Mountainous land 80,00 chrs.-</p>
4,000	<p>N 89° 5' 5" E on a random line bet. secs. 10 and 15</p> <p>Set limb 1/4 sec. cor.</p>
79.92	<p>Intersect N. and S. line at 8 hrs. S. of cor. of secs. 10-11- 14 and 15</p> <p>Thenel I run</p> <p>S 89° 5' 8" W on a true line bet. secs. 10 and 16</p> <p>On mountainous land</p>

Subdivision of T 10 S R 2 E

chains 25.30	Descending on broken s.w. slope in dense tall brush Bottom of gulch 400 ft below cor. and creek 600 ft wide course N.
37.50	Begin ascent on abrupt slope Top of gulch and low ridge 300 ft above creek, course N and S
39.96	Descending gradually Set at sandstone 18 x 10 x 6 in. 12 in. in the ground for 1/4 sec. cor. marked 1/4 on N. face; raised a mound of stones 2 ft base 1 1/2 ft high s. of cor. Pitt impracticable
41.50	Bottom of draw course S 20° E
48.10	Begin ascent
74.00	Wood road bears N. 20° E and S 20° W
74.92	Begin abrupt ascent on main mountain range bears N 25° E and S 25° W
79.92	The cor. of sec 9-10-15 and 16 Thin cor. stands 500 ft above the 1/4 sec. cor. Land mountainous very broken Soil gravelly and rocky 3rd rate No timber. - Dense oak, maple, aspen, and thornbrush the whole distance Mountainous land 79.92 chs

October 6, 1895

11.40	October 7: at 8:30 a.m., I set off 34° 58' North the lat. are 5° 39' S on the decl. arc and determine a true meridian with the solar at the cor. of sec. 9-10-15 and 16 thence I run N 0° 2' W decl. sec 9 and 10 on mountainous land
18.80	Ascending on S. E. slope, in oak brush
26.20	Top of spur N. E. 150 ft above cor.
40.00	Begin descent on broken slope Enter timber bears N. E. and S. W.
45.00	Bottom of ravine course N. E. 130 ft deep Ascending to
51.20	Top of spur E. and beginning of descent
58.00	Set at limestone 18 x 7 x 6 in. 12 in. in the ground for 1/4 sec. cor. marked 1/4 on N. face from which an aspen tree 7 in. diam. bears N. 80° 5' E. 57 lbs. dist. marked 1/4 S 10 1/2 W. no other trees within limit

Subdivision of T.10 S.17.2 E

chain Raised w mound of stones 2 ft. base 15 ft. high N.E.
cor. - Pitt impracticable
Timber has gradually changed to dense brush.
Bottom of gulch 400 ft below spur, course N.E.
Ascending W
Top of broken ridge 100 ft high bears N.E. and S.W.
Begin descent on gradual slope
Sch w limestone 18 x 1020 ins. 12 ins. in the ground
for cor. of secs. 8-4-9 and 10 marked with 5 notches on
5 and 3 notches on E. edges raised w mound of stones
2 ft base 1 1/2 ft high W. of cor. - Pitt impracticable -
Land mountainous, very broken
Soil gravelly and rocky 3rd rate
Timber, pine of fair size, mainly scattering, and some aspen
Dense Oak brush on N 1/2 mile
Mountainous land 8,000 chs. -

N 89° 68' E on a random line bet. secs. 3 and 10
Spt temp 1/4 sec. cor.
Intersect N and S line at cor of secs. 2-3-10 and 11
Thence N river
S. 89° 58' W on a true line bet. secs. 3 and 10
On mountainous land
Descending on abrupt slope, in dense brush
Payson Creek 16 chs. wide rapid current 100 ft below cor. in
bottom of narrow canon
Begin ascent on rolling broken surface
Wood road bears N 25° W and S 25° E
Begin abrupt ascent on rocky slope, course N and S
A stationary limestone 18 x 16 x 14 ins. above ground
for 1/4 sec. cor. marked 1/4 sec. surface from which
a maple tree 4 ins. diam. bears N 30° E 11 chs. dist.
marked 1/4 sec. S. B.T. no other trees within limit
Raised w mound of stones 2 ft base 15 ft high N. of cor.
Pitt impracticable
Tip of spur course N.E. 400 ft above creek
Thence on broken surface
The cor. of secs. 3-4-9 and 10
Land mountainous, very broken
Soil gravelly and rocky 3rd rate
No timber

Subdivision of T10S R2 E

chain	Dense undergrowth of oak, maple, aspen, and thorn Mountainous land 56.14 chs.-
	October 7. At this cor. I set off 5° 42' 5" on the decl. side and at 114.65 a.m. just above the cor. of the meridian the resulting lat. is 39° 5' 4"
8266	80° 2' N on a random line bet. sec. 3 and 4 Set temp. 44 sec. cor.
8266	Enters N. bay of Tp. at cor. of secs. 3-4-33 and 34 which is a stone fence set marked and measured as described by the surveyor general. Thence I run 80° 2' E on a true line bet. secs. 3 and 4 On mountainous land Descending on rolling S.E. slope in oak brush Bottoms of hollows 80 ft below cor. corner 6... ascend to
9.50	Top of spur N. 65° E 200 ft high Descending on steep S. slope
30.60	80° 2' limestone 15x10x6 ins. 12 ins. in the ground for 14 sec. cor. marked 1/4 on W. face, raised w mound of stones 2 ft. base 15 ft high W. of cor. Oil impracticable
42.66	Total of nine bears. N.E. end 8.15. 320 ft below Tp. bay. Enter broken bench, and dense undergrowth -
-4.70	2 1/2 ins. cor. 45° 65° E
67.25	Begin gradual ascent
52.66	The cor. of secs. 3-4-9 and 10 Lined mountainous, Soil gravelly and rocky 3rd rate - its winter - dense undergrowth of oak and maple and small thorn -
	Mountainous land 8266 chs.-

October 7, 1898

October 8: at 8:25 a.m., just I set off 39° 5' 4" on the lat. arc 6° 2' 5" on the decl. are and determine a true meridian with the solar at the standard cor. of secs. 32 and 33; thence I run
80° 3' N bet. secs. 32 and 33
On mountainous land

Subdivision of T 10 S R 2 E

Chains 8,60	Ascending in broken and undergrowth Top of spur N. E.
	Begin descent
30,00	Enter bottom of Santquin Canon bears N and S.E. and begin gradual descent on broken surface
40,00	Set a limestone 18 x 10 x 6 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face raised a mound of stones 2 ft. base 1 1/2 ft high W. of cor. Pits impractical
40,30	Old road from Santquin bears N. W. and S.E.
4340	Road from Payson Canon bears about E. and W.
45,00	Summit creek 15 1/2 ins. wide rapid current, in bottom of channel 10 ft. deep flows N.W.
	Begin abrupt ascent
60,00	Top of ridge bears E and W 450 ft above creek
	Begin descent on abrupt slope
65,60	Meadow Creek 5 1/2 ins. wide in narrow ravine. 200 ft delta course S 60° W.
	Begin abrupt ascent
80,00	Set a limestone 18 x 10 x 7 ins. 12 ins. in the ground for cor. of secs. 28-29-32 and 33 marked with 1 notch on 5 and 4 on E. edges; raised a mound of stones 2 ft base 1 1/2 ft high W. of cor. Pits impractical Land mountainous Soil gravelly and rocky 2nd rate
	No timber -
	Dense undergrowth of oak and aspen brush and thorn
	Mountainous land 80,00 chrs. -
40,00	East on a random line bet. secs. 28 and 33
	Set temp. 1/4 sec. cor.
80,00	Intersect N. and S. line 15 1/2 ins. N of cor. of secs. 27-28-33 and 34
	Three 1/2 ins.
	N 89° 5' 4" W on a true line bet. secs. 28 and 33
	On mountainous land
	Descending, in timber
24,97	Stream 6 1/2 ins. wide curves N.W. in bottom of gulch 300 ft below cor.
	Begin ascent
25,24	Wood road bears N. W. and S.E.

Subdivision of T 105 R. 2 E.

Chains	
4,000	Set a limestone 18 x 10 x 6 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face, whence a pine tree 12 ins. diam. bears S 57° 50' E 15° E. lat. dist. marked 1/4 S. 33 B.T. A pine tree 10 ins. diam. bears N. 30° W. 60° E. lat. dist. marked 1/4 S. 28 B.T.
41,000	Raised a mound of stones 2 ft base 1 1/2 ft high N of cor.
41,000	Top of spur N 15° W 226 ft high Begin descent
51,27	Dry wash in ravine 110 ft deep course N. 60° W Ascending
57,65	Top of spur N.W. and beginning of descent Leave timber bears E. and S. and enter dense brush
65,14	Meadow creek 1.0 elev. wide course S 65° E in open gulch Begin ascent
65,39	Road from Paysonquin Canon to Payson canon bears S 45° E and N. 45° W.
80,000	The cor. of secs. 28-29-32 and 33 This cor. stands on S.E. slope 300 ft above creek Land mountainous Soil gravelly and rocky 3rd rate Timber pine and aspen of fair size Dense undergrowth of oak and aspen brush Mountainous land 80,000 chs. - October 8: The sky being overcast during the second hour I was unable to observe the sun or other meridians. -
	N 0° 3' W bet. secs. 28 and 29 On mountainous land Ascending on steep S.E. slope, in dense undergrowth
17,000	Enter Mountain mahogany and pine timber course S.E. and S.W. Leave undergrowth
36,000	Enter steep, rocky E. slope, and scattered timber
44,000	Set a limestone 18 x 10 x 8 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face; raised a mound of stones 2 ft base 1 1/2 ft high W. of cor. - Pitt impracticable
55,000	Enter heavy pine timber course E. and W.
80,000	Set a limestone 18 x 10 x 8 ins. 12 ins. in the ground for

Subdivisions of T10 S R 2 E

chains	<p>cor. of secs. 20-21-28 and 29 marked with 2 notches on S. and 4. on E. edges; from which</p> <p>A pine tree 36 in. diam. bears S. $29^{\circ} 45' W.$ 58 chs dist. marked T10 S R 2 E S 20 B.T.</p> <p>A pine tree 24 in. diam. bears S. $41^{\circ} 40' W.$ 119 chs dist marked T10 S R 2 E S. 29 B.T.</p> <p>No other trees within limit</p> <p>Raised a mound of stones 2 ft. base $1\frac{1}{2}$ ft. high N. of cor. Pith impracticable. --</p> <p>This cor. stands about 8.00 ft. above the cor. of secs. 28-29-32 and 33</p> <p>Land mountainous very rugged</p> <p>Soil rocky and gravelly - mostly barren rock</p> <p>Timber pine of large size and thin growth; and mahogany</p> <p>Dense oak break on 1$\frac{1}{2}$ 1$\frac{1}{4}$ 00 chs.</p> <p>Mountainous land 8,000 chs. -</p>
4,000	S $89^{\circ} 54' E$ on a random line bet. secs. 21 and 28
	Set limb $\frac{1}{4}$ sec. cor.
80,12	<p>Intercept N and S line 14 chs. S of cor. of secs. 21-22-27 and 28</p> <p>Thence S run</p> <p>West on a true line bet. secs. 21 and 28</p> <p>On mountainous land</p> <p>Ascending on broken slope in aspen brake and scattering timber</p>
23,40	<p>Top of ridge bears S E and N. W. 300 ft. above cor</p> <p>Begins descent</p>
26,700	The "meadow" reservoir about 3 chs diam bears S $18^{\circ} 30' W$
40,06	<p>Set w. trachyte stone 18 x 12 x 10 in., 12 in. in the ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on N. face:</p> <p>Raised a mound of stones 2 ft. base $1\frac{1}{2}$ ft. high N. of cor. - Pith impracticable</p>
41,40	<p>Bottom of open gulch 25 ft. deep cor. S. $25^{\circ} E$</p> <p>Begins ascent on gradual slope to</p>
73,00	Foot of steep rocky as cent bears about N. and S.
75,00	Enters fine timber
80,12	<p>The cor. of secs. 20-21-28 and 29</p> <p>Land mountainous very broken</p>

Subdivision of T 10 S 12 E

chains.	Soil gravelly and rocky 3 rd and 4 th rate Timber aspens of small size and pine of large size scattering Dense aspen brake and brush Mountainous land 8012 chs. -
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October 8, 1898

	October 10: I run N 0° 3' W bet. secs. 20 and 21 On mountainous land On rocky, steep, E. slopes, in timber 3.00 Begin descent on E slope 10.00 Bottom of ravine 150 ft deep course E Leave timber bear E. and W. Begin ascent on steep S.E. slope in aspen brake 22.00 Leave brake bears N.E. and S.W. 40.00 Set at limestone 18 x 9 + 6 in. 12 in. in the ground for 1/4 sec. cor. marked 1/4 on W. face; raised a mound of stones 2 ft. base 1 1/2 ft. high W. of cor. Pits impracticable. - - 8.000 A stationary limestone 20 x 18 x 18 in. above ground for cor. of secs. 16-17-20 and 21 marked with 3 notches on S and 4 notches on E. edges. raised a mound of stones 2 ft. base 1 1/2 ft. high W. of cor. - Pits impracticable. This cor. stands 1100 ft above the cor. of secs. 20-21-28 and 29 Land mountainous Soil rocky and gravelly 4 th rate Timber pine of large size; dense aspen brake Mountainous land 8000 chs. -
4000	East on a random line bet. secs 16 and 21 Set limb 1/4 sec. cor.
8.000	Intersect N. and S. line at cor. of secs. 16-16-21 and 22 Hence I run West on a tree line bet. secs. 16 and 21 On mountainous land Ascending in aspen brake 35.00 Top of spur N. 05° E. 400 ft above cor. Descending gradually to

Subdivision of T 10 S R 2 E

Chain Line	
39,00	Head of gulch course N.E. Begin ascent on gradual slope
40,00	Set at sandstone 18 x 10 x 8 in. 12 in. in the ground for 1/4 sec cor. marked 1/4 on N. face; raised a mound of stones 2 ft base 1 1/2 ft high N. of cor. Pits impracticable
50,50	Foot of main mountain chain bet. Santaquin Canon and Payson Canyon bears N.E. and S.S.E. Begin abrupt ascent on rocky slope
52,00	Leave broken
80,00	The cor. of secs. 16-17-20 and 21 This cor stands 1400 ft above cor of secs. 15-16-21 and 22 Land mountainous very rugged Soil rocky and gravelly 3rd and 4th rate Timbered aspects of small size, mainly dense brack 1 to 4 in. diam. - Mountainous land 8,000 chs. - October 10: At this cor. I set off 6° 52' S. on the decl. arc and at 11° 47' m. a.m., 2 mt. observe the sun on the meridian the resulting latitude is 39° 56' N
94,50	N. 0° 3' W. bet. secs 16 and 17 On mountainous land Ascending on steep S.E. 26° 10'
95,00	Top of divide between Utah Valley and Payson Canyon a sharp rocky ridge which is the Northern Extension of the Mt. Nebo Range - the western slope descends abruptly for about 4000 ft to Utah Valley. - Thence along top of divide
40,00	Set at limestone 18 x 9 x 7 in. 12 in. in the ground for 1/4 sec cor. marked 1/4 on N. face; raised a mound of stones 2 ft base 1 1/2 ft high N. of cor. Pits impracticable -
75,00	Top of divide turns N. 10° E. begin gradual descent on N. slopes
80,00	Set at limestone 24 x 8 x 6 in. 18 in. in the ground. for cor of secs. 8-9-16 and 17 marked with 4 notches on S. and E. edges; raised a mound of stones 2 ft. base 1 1/2 ft high N. of cor. - Pits impracticable Land mountainous - high broken around and crest

Subdivision of T 10 S R 2 E

chains	Soil rocky and gravelly - mainly barren rock Timber, a few scrubby pine scattered Mountainous land 8,000 chs. -
4,000	October 10, 1898 at 3 ^h 10 ^m p.m. I set off 39°58' N " on the latitude arc 6°54' S on the decl. arc and determined a tree meridian with the solar at the cor. of sec. 8-9-16 and 17. Thence I ran East on a random line bet. sec. 9 and 16 Set comp. 1/4 sec. cor.
80,20	(Intersect it. and S. line 28 ft. E. of cor. of sec. 9-10-15 and 16 Thence I ran S 89°48' W on a new line bet. sec. 9 and 16 On Mountainous land Ascending on steep broken slope, in dense brush
7,20	Top of spur N.E. 200 ft above cor. Thence on broken N. slope in scattering timber
21,65	Head of gulch 60 ft. deep course N. E. and beginning of ascent Enter fine timber, covered N. and S.
40,10	Set a limestone 18x9x6 in. 12 in. in the ground for 1/4 sec. cor. marked 1/4 on S. face thence an aspen tree 8 in. diam. bears N 18° 10' 24" 21 1/2 ft. dist. marked 1/4 S. 9 13. T.
77,00	A fine tree 9 in. diam. bears S 41° 35' E 32 ft. dist. marked 1/4 S. 16 B.T. Top of divide between Utah Valley and Payson Canyon course about N. and S. 1600 ft above cor of sec. 9-10-15 and 16 Begin descent on steep rocky slope Leave timber
80,20	The cor. of sec. 8-9-16 and 17 Land Mountainous, very rugged. Soil gravelly and rocky & bare - Timber, fine and aspen of fair size but scattering growth Dense oak brush and aspen brake. Mountainous land 8,020 chs. -

October 10, 1898

Subdivision of T 10 S 17 2 E

chains	October 11, 1898 at 8:45 a.m. I set off 3' to the left from the true meridians established by observation on the sun October 10, 1898, and run 40° 3' W. bet. secs. 8 and 9 On mountainous land
4,000	Through a scattering timber on broken w. slope set a limestone 18 x 9 x 6 in., 12 in. in the ground for 1/4 sec. cor. marked 1/4 sec. W. face; raised a mound of stones 2 ft. base 1 1/2 ft. high w. of cor. - Pits impracticable.
4,200	Top of divide between Utah Valley and Payson Canyon bears N. 10° W. and S. 25° E.
8,000	Timber becomes, heavy growth of pine and aspen Set a sandstone 18 x 18 x 7 in., 12 in. in the ground for cor. of secs. 4-5-8 and 9 marked with 5 notches on S. and 4 notches on E. edges. from which An aspen tree 5 in. diam. bears S. 30° 0' W. 21 elev. dist. marked T 10 S 17 2 E. S. 8 B.T. An aspen tree 5 in. diam. bears N. 70° 35' W. 13 elev. dist. marked T 10 S 17 2 E. S. 5 B.T. An aspen tree 6 in. diam. bears S. 41° 0' E. 36 elev. dist. marked T 10 S 17 2 E. S. 4 B.T. Land mountainous very broken - soil gravelly and rocky 4th rate - Timber fine and aspen of thick growth but mostly small size. - Mountainous land 8,000 chs. -
4,000	N 89° 48' E. on a random line bet. secs. 4 and 9 Set limb. 1/4 sec. cor.
7,986	Intersect N and S. line 27 elev. N of cor. of secs. 3-4 9 and 10 Thereon I run West on a tree line bet. secs. 4 and 9 On Mountainous land Ascending gradually in broken ground, in dense oak brush
26,767	Dry wash in ravine 30 ft. deep drains N 20° E

Subdivision of T. 10 S. R. 2 E.

chains	
28,40	Dry wash in ravine 60 ft deep drains N 70° E Begin ascent on steep rocky slope
36,00	Top of spur S. 15° E 150 ft above wash Begin descent to
39,93	set w sandstone 18 x 10 x 6 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face: raised a mound of stones 2 ft. base 1 1/2 ft. high N. of cor. Pits impracticable
40,45	Dry wash and bottom of ravine 100 ft deep concur S. 75° E. Begin steep ascent, in aspen brush and brush
70,00	Enter timber bear N. W. and S. E.
79,86	The Cor. of secs 4-5-8 and 9 This cor. stands about 1000 ft above cor. of secs 3-4-7 and 10 Land mountainous very rugged soil gravelly and rocky 3rd and 4th ratio Timber, aspen, and a few pine scattering. Dense oak brush and aspen brush Mountainous land 7986 chs.— October 11, 1898: at this cor. I set off 70 1/4' S. on the decl. arc. and at 11 1/4' a.m. 2 m.t. observed the sun on the meridian the resulting latitude is 39° 59' N
4,000	N. 0° 3' W. on a random line bet. secs. 4 and 6— Set limb. 1/4 sec. cor.
82,37	Intersect N. bdy. of Tp. at cor. of secs. 4-5-32 and 33 which is a stone firmly set marked and situated as described by the surveyor general.— Thence I run
5,0° 3' E on a true line bet. secs. 4 and 6— On mountainous land Ascending on broken N. W. slope. In pine and aspen timber	
42,37	set w sandstone 18 x 9 x 6 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face: raised a mound of stones 2 ft. base 1 1/2 ft. high N. of cor. Pits impracticable.—
70,00	Top of divide between Utah valley and Payson cañon

Subdivision of T 10 S 18 E

chain	bears N. 20° E. and S. 20° W. 600 ft above cor. on N. slope of tip.
	Begin descent
7700	Head of ravine draining S 80° E. 150 ft below tip of divide
	Descending to
82,37	The cor. of secos. 4-5-8 and 9 Land mountainous very broken Soil rocky and gravelly 4 ft. rate Timber pine aspen and mountain mahogany mostly of small size and thin scattering growth.
	Mountainous land 5,297 chs.

October 11, 1898

	October 12, 1898: From the standard cor. of secos. 31 and 32 corner N. 0° 3' W. bet. secos. 31 and 32 On mountainous land
	Descending on N.E. side in timber
2,30	Bottom of gulch soft drift covered to 75° E. Lava boulders big ascent on steep rocky slopes
33,01	Top of spur E. from main range 60 ft. above yellow begin descent on rocky talus surface
40,01	Set candlestick 28 x 10 x 7 in. in mound of stones 1 ft. base 15 ft. high on rocky surface for cor. of secos. 29-30-31 and 32 marked front surface raised a mound of stones 2 ft. base 15 ft. high fit of cor. Pits infrequent.
47,57	Head of ravine corner secos. 31 and 32 There are traces of <i>Salsola</i> <i>canescens</i>
80,00	Set a candlestick 28 x 10 x 7 in. in mound of stones 3 ft. base 15 ft. high on rocky surface for cor. of secos. 29-30-31 and 32 marked with 1 notch on S. end 3 notches on E. edges. - Pits infrequent Land mountainous very rugged Soil rocky and gravelly - mainly barren rock Timber pine and aspens of fair size Mountainous land 8,000 chs. -

East on a random line bet. secos. 29 and 32 -
set limb. 14 sec. cor.

Subdivision of T. 10 S. R. 2 E.

chain 8024	Intersect N. and S. line at cor. of secs. 28-29-32 and 33 Thence C. run West on a tree line bet. secs. 29 and 32 On mountainous land Ascending, in dense undergrowth
15,55	Top of sharp spur course S. 20° W. 170 ft. above cor. Begin descent on steep, rocky, broken slope
40,12	Set a sandstone 18x10x6 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on st. face; raised a mound of stones 2 ft base 1 1/2 ft. high, st. of cor. - Pile impracticable -
48,35	Summit Creek 16 elev. miles in bottom of Saquatium Canyon which is about 2000 ft deep, very narrow and steep-sided course N.W.
48,75	Old road from Sawmills to Valley but now washed out in many places and impassable, course N.W. and S.E.
59,60	Begin ascent on steep rocky side of canyon
80,24	1/4 cor. of secs. 29-30-31 and 32 Land mountainous. Very rugged Soil rocky, and gravelly, mostly barrow rock Timber a few scrubby mahogany cedar and pine Mountainous land 80,24 chd. - October 12, 1898: At this cor. I set off 7.37' S. of the deed. cor. and at 11440" a.m. I ant. observed the sun on the meridian; the resulting latitude is 39° 55' N
80,05	West on a random line bet. secs. 30 and 31 Set 5 ins. 1/4 sec. cor.
81,02	Intersect W. bdy. of Tp. 16 elev. 1/4 of cor. of secs. 25-30 31 and 36 which is a stone firmly set marked and written as described by the surveyor general. Thence C. run N. 57° 53' E on a tree line bet. secs. 30 and 31 On mountainous land Ascending on cliff broken slope, in scattering timber and brush
85,92	Set a limestone 18x8x6 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on st. face; raised a

Subdivision of T 10 S 12 E

claims	mound of stones 2 ft. base 15 ft high N. of cor. Bld impracticable.
56.67	Top of divide between Current Creek and Santagrin Canyon bears N. and S. 1600 ft above cor. on W. side of Th. a sharp rocky ridge which is the northern spur of Mt. McDo range.
80.32	Descending on broken rocky slope The cor. of secos 29-30-31 and 32 Land mountainous, very rugged Soil gravelly and rocky, mainly barren rock Timber aspen and pine and some mountain mahogany, mostly small sized scattering Mountainous land 80,32 chs. -
	October 12, 1898: at 5 ^h 30 ^m p.m., I set off 39°55' N on the lat. arc 7°39': on the decl. arc and determine a true meridian with the solar at the cor. of secos 29-30-31 and 32, thence I run N 0°3' W bet. secos. 29 and 30 On mountainous land Descending on steep, rocky, broken slope of Santagrin Canyon Bottom of Canyon bears N. N. and S. E. 900 ft below cor.
29.00	Old road, washed out, from savannah to Valley follows bottom of canyon
30.10	Summit Creek 18 chs. with course N. N.
30.95	Begin ascend on broken m. slope
46.00	Set a limestone 18 x 9 x 6 ins. 12 ins. in the ground for 1 st sec. cor. marked 1400 ft. face; raised a mound of stones 2 ft. base 15 ft high N. of cor. Bld impracticable. -
46.00	Top of spur 1150 ft above creek
	Descending to
51.70	Bottom of ravine 100 ft. deep courses N.
	Ascending
60.00	Top of spur 160 ft above ravine slopes N.
	Begin descent
69.90	Bottom of ravine 230 ft. deep, and dry wash courses N.
	Ascending to

Subdivision of T. 10 S. R. 2 E

chains

8,000

Set a quartzite stone 18x10x6 ins. 12 ins. in the ground for cor. of secs. 19-20-29 and 30 marked with 2 notches on S. and 6 notches on E. edges from wheels of cedar tree 6 ins. diam. bears N 45° 28' W. 45 lbs. dist. marked T. 10 S. R. 2 E. S. 19 B.T.
no other trees within limits
Raised a mound of stones 2 ft. base 1½ ft high N. of cor.
Land mountainous very broken and rugged
Soil rocky and gravelly; mostly barren rock
Timber a few scrubby pine and cedar.
Mountainous land 8,000 chrs. —

October 12, 1898

4,000

October 13, 1898: at 9:45 a.m., P.M.T. I set off 39° 56' W. on the lat. arc 7° 58' S. on the decl. arc and determine a true meridian with the solar at the cor. of secs. 19-20-29 and 30, thence I run East on a random line bet. secs. 20 and 29

5,000

Ret. comp. ¼ sec. cor.

8,000

Intersect N. and S. line 17 lbs. S. of cor. of secs. 20-21-28 and 29

Thence I run

S. 89° 53' W. on a true line bet. sec. 20 and 29

On mountainous land

Ascending on rocky slope, in timber

Top divide between Utah Valley and Payson Cañon bears N. and S. (a prominent black peak bears S about 9 chrs.) - 600 ft above cor. and beginning of steep broken descent. —

Timber becomes scattering and stunted

Set a quartzite stone 18x9x7 ins. 12 ins. in the ground for ¼ sec. cor. marked ¼ sec. N. face raised a mound of stones 2 ft. base 1½ ft. high N. of cor. Pili impracticable. —

— 8,000

The cor. of secs. 19-20-29-30

Land mountainous very rugged

Soil rocky and gravelly; mostly barren rock
Timber pine and cedar mainly of small size and scattering

Subdivisions of T. 10 S. R. 2 E.

Chains	Mountainous land 80,30 chs.
4,000	589°5' W. on a random line bet. sec. 19 and 30 Set lins. 1/4 sec. cor.
79,92	Intersection N. bdy. of Tp. 10 less S. of cor. of secs 19-24-25 and 30 which is a stone firmly set marked and witnessed as described by the Surveyor general. - Thenell Creek
	N. 89°5' E. on a true line bet. secs. 19 and 30 On mountainous land
	Ascending in broken N.W. slopes
23,00	Top of spur st. from main ridge 400 ft above cor begin descent on broken N.E. slopes
39,92	Set on limestone 20x10x7 ins. 19 ins in the ground for 1/4 sec. cor. marked 1/4 on N. face; raised a mound of stones 2 ft high 1 1/2 ft. high N. of cor. Pits impracticable
40,40	Drag road course bears N. and S
50,30	Summit Creek 18 chs. wide courses N.W. in bottom of steep narrow gulch, 800 ft below tip of spur
50,85	Pond from Canyon to Valley course N.W. and S.E. Begin ascent on sloping broken bench land
6200	Ascent becomes steep and rocky
79,92	The cor. of secs. 19-20-29 and 30 This cor. stands about 530 ft above creek. Land mountainous, very broken soil rocky and gravelly 4 th rate Timber, a few scrubby pine scattering Dense undergrowth of oak and maple Mountainous land 7992 chs. -
	October 13, 1898: at this cor. I set off 705' S. on the decl. are. and at 11446 th min, 2.m.t. observed the sun on the meridian; the resulting latitude is 39°5'6" N
5,00	N. 0°3' W. bet. sec. 19 and 20 On Mountainous land
	Ascending, in dense oak brush
	Top of spur st. from divide
	Begin descent

Subdivision of T. 10 S. R. 2 E.

chain	
2290	Bottom of ravine 290 ft. deep course W. Begin ascent
4000	Set a quartzite stone 18x11x6 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 or N. face; raised as mound of stones 2 ft base 1/2 ft. high N. of cor. Pit impracticable This cor. stands on lip of a spur N. from divide Begin descent
5350	Bottom of ravine 250 ft deep course W Ascending to
8000	Set a quartzite stone 18x9x7 ins. 12 ins. in the ground for cor. of sec. 17-18-19 and 20 marked with 3 notches on S. and 5 notches on E. edges. from which A pine tree 18 ins. diam. bears S. 71° 3' W. 25 ft. dia. marked T. 10 S. 17. 2 E. S. 18 B.T. no other trees within limit: raised as mound of stones 2 ft base 1/2 ft. high N. of cor. Pit impracticable:- Land mountainous very broken soil gravelly and rocky 3rd rate No timber: dense oak brush Mountainous land 80,000 ac.

October 13, 1898

40,00	A heavy storm prevented work on October 14-15 and 16 October 17, 1898: (cont.) S. 89° 03' E over a random line bet. secs. 17 and 20 Alt temp. 44 sec. cor.
80,18	Intersect N. and S. line 10 deg. S. of cor. of secs. 16-17-20 and 21 Thence C. run S. 89° 49' W. on a true line bet. secs. 17 and 20 On mountainous land
11.83	Ascending, steep rocky slope Top of sharp rocky ridge of divide between Utah Valley and Payson Canon which is the northern extension of the Mt. Nebo range course N. 15° E and S. 15° W. 2000 ft above cor. Begin descent on very steep rocky slope

Subdivision of T. 10 S. R. 2 E.

Chain 40,09	and scattering scrubby pine, cedar and mountain mahogany Set as quartzite stones 18 x 9 x 6 ins. 12 ins. in the ground for 1st section marked 14 on S. face raised as mound of stones 2 ft. base 1 1/2 ft. high E. of cor. Pits impractical.
- 80,18	The cor. of secs 17-18-19 and 20 This cor. stands about 3000 ft. below top of divide Land Mountainous very rugged soil rocky and gravelly - mainly talus rock Timber pine cedar and mountain mahogany of small size and scattering growth. Mountainous land 80,18 chs.
40,05	October 17, 1898 at 94 86 m. a.m. I set off 39° 5' N. on the lat. and 90° 25' S. on the decl. and determine a true meridian with the odometer at the cor. of 2000.17-18-19 and 20. Thence I run S 89° 5' 7" W on a random line bet. sec. 18 and 19 Set 4 ins. 1/2 sec. cor.
79,07	Intersect W. bdy of Tp. 136 chs. so old cor. of sec. 13-18-19 and 24 which is a stone firmly set marked and will stand as described by the surveyor general. Set as quartzite stones 18 x 10 x 7 ins. 12 ins. in the ground for closing cor. of sec. 18 and 19 marked c. c. on S. with 3 grooves on N. and S. faces raised as mound of stones 2 ft. base 1 1/2 ft. high E. of cor. Pits impractical. Deleting all marks on cor. of sec. 13-18-19 and 24 pertaining to sec. 18 and 19 Thence I run N 89° 5' 7" E. on a true line bet. sec. 17 and 19
6,60	On Mountainous land, and through dense undergrowth Ascending from Creek bottom, in dense oak brush. Top of bench about 100 ft. above cor. cross road S.E.; enter cutting, br. trees upfall and begin gradual ascent Set as sandstone 18 x 10 x 7 ins. 12 ins. in the ground for 1st sec. cor. marked 14 on S. face,
89,30	

Subdivision of T 10 S 18 E.

Chains	raised a mound of stones 2 ft base 1½ ft high St. of cor. Pits impracticable
6,000	Foot of main mountain slope bears nearly N and south: begin steep ascent
7,950	The cor. of sec. 17-18-19 and 20 This cor. stands about 800 ft above the closing cor. Land Mountainous, and broken bench Soil gravelly and rocky 3rd and 4th rate No Timber Dense Undergrowth of oak brush the entire distance Mountainous Land, and Dense Undergrowth 7,950 chs. <u>Note:</u> The weather being cloudy during the noon hour I was prevented from observing the sun while on the meridian: October 17, 1898
	N 0° 3' W. bet. sec. 17 and 18
0,30	On mountainous land Ascending, in oak brush
	Top of spur N.
	Begin descent
7,00	Bottom of gulch 150 ft deep course N.
	Ascending
15,15	Top of spur N. and beginning of descent
29,60	Bottom of sharp ravine 300 ft deep course N ascending to
36,60	Top of spur N. from main divide Begin descent
40,00	Set a quartzite stone 18 x 9 x 6 ins 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face; raised a mound of stones 2 ft base 1½ ft high St. of cor. Pits impracticable
44,60	Bottom of ravine 200 ft. deep course N 80° W. ascending to
52,68	Top of spur N. from divide and beginning of descent
70,70	Bottom of narrow rocky ravine course N. 75° W Begin steep ascent
8,000	Set a quartzite stone 18 x 10 x 6 ins. 12 ins. in the ground for cor. of sec. 7-8-17 and 18 marked with 4 notches on S and 5 notches on E. edges: raised a mound of stones 2 ft base 1½ ft high St. of cor.

Subdivision of T. 10 S. R. 2 E.

chains	Pits impracticable Land mountainous very rugged soil gravelly and rocky 4th ratio No timber: - Deemed oak brush the whole distance Mountainous land 80,000 chs. -
4000	11.89° 49' E on a random line bet. secs. 8 and 17 Set comp $\frac{1}{4}$ sec cor.
80.06	Intersect N and S. line 34 chs. N. of cor. of secs. 8-9- 16 and 17 Thence O run 11.89° 56' W. on a true line bet. secs. 8 and 17 On mountainous land Descending on steep broken slope in scattering timber Leave timber bears N. and S.: enter oak brush
26.50	Set a quartzite stone 18 x 8 x 6 ins. 12 ins. in the ground for $\frac{1}{4}$ sec cor. marked $\frac{1}{4}$ on N. face: raised as mound of stones 2 ft. base) 15 ft. high N. of cor. Pits impracticable
40.03	Descending on steep rocky slope on E. side of spur Top of spur running N 76° W from divide The cor. of secs. 7-8-17 and 18 This cor. stands about 2200 ft below cor. of secs. 8- 9-16 and 17 Land mountainous very rugged Soil rocky and gravelly; mainly barren rock Timber fine, mountain mahogany and cedar mostly of small size and scattering growth Mountainous land 80,06 chs. -

October 17, 1898

	October 18, 1898 O run West on a random line bet. secs. 7 and 18 Scarlet was made for the witness cor. but it could not be found within a radius of 400 chs.
47.60	Intersect N. bdy. of Tp. 2.12 chs. S. of cor. of secs. 7- 12-13 and 18 which is a stone firmly set marked and witnessed as described by the surveyor General
79.69	Thence O run East on a resurvey line bet. secs. 7 and 18

Subdivision of T. 10 S. R. 2 E

chains	
32,40	A close search was made for two hours, for the Wilcox cor. as described by the surveyor general but no trace of any cor. could be found.
88,50	Foot of main mountain slope; bears about N. and S.; begin steep ascent.
40,00	Set a quartzite stone 18 x 8 x 6 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face, raised a mound of stones 2 ft. base 1 1/2 ft. high S. of cor. Pits impracticable:- Thereon I rested.
79,69	Eastward true line bet. E. 1/2 of secs 7 and 18 On mountainous land Ascending steep even slope, in dense brush Intersect. N. and S. line 2 1/2 chs. N. of cor. of secs. 7-8-17 and 18 ^{9,69} Set a quartzite stone 18 x 8 x 6 ins. 12 ins. in the ground for closing cor. of secs. 7 and 18 marked C.C. on E. with 5 grooves on E. and 4 grooves on S. faces raised a mound of stones 2 ft. base 1 1/2 ft. high W. of cor. Pits impracticable I obliterate markings on cor. of secs 7-8-17 and 18 pertaining to secs. 7 and 18 and make it cor. of secs 5 and 17 Land mountainous steep and rugged Soil gravelly and rocky 3rd rate No timber: Dense oak brush Mountainous land 39,69 chs. -
0,70	From cor. of secs. 8 and 17 (true) N 0° 3' W. bet. secs. 8-18 and 4 On mountainous land ascending on broken slope in dense oak brush
2,12	Top of spur N. 75° W from divide and beginning of descent True closing cor. of slope 7 and 18
14,00	Bottom of ravine 400 ft. deep course N 80° W. Begin ascent
31,50	Top of sharp spur N. 46° ft above ravine and beginning of descent
36,10	Head of ravine N. 100 ft. deep, and beginning of ascent

Subdivision of T 10 S R 2 E

Chains	
40.00	Set a quartzite stone 18 x 10 x 6 ins. 12 ins. in the ground for 1/4 sec. cor. marked "low N. face raised a mound of stones 2 ft. base 1 1/2 ft. high N. of cor. Pili impractical
42.50	Top of spur N. from divide Begin descent
57.60	Bottom of narrow ravine 380 ft. deep course N 72° W. Ascending it
77.85	Top of sharp rocky spur N. from divide 400 ft above ravine Descending it
80.00	Set a quartzite stone 18 x 9 x 6 ins. 12 ins. in the ground for cor. of secs. 5-6-7 and 8 marked with 5 notches on S. and E. edges; raised a mound of stones 2 ft. base 1 1/2 ft. high N. of cor. Pili impractical. Land mountainous very broken Soil gravelly and rocky 3 rd rate No timber: dense brush mainly oak Mountainous land 80.00 chs.
	October 18, 1898: At this cor. I set off 90 50' S. on the decl. arc and at 11 ^h 45 ^m a.m., 2 m.t. observed the sun on the meridian the resulting latitude is 39° 57' N
40.00	S 89° 56' E on a random line bet. sec. 5 and 8 Set limb 1/4 sec. cor.
80.22	Intersect N. and S. line 16 lks. S of cor. of secs. 4- 5-8 and 9 Thinly treed S 89° 57' W. on a true line bet. sec. 5 and 8 On mountainous land Ascending, in timber
120	Top of main divide bet. Mill Valley and Payson Course crossed N. and S. Begin descent
1400	Lined limbo course N. and S. Begin steep rocky descent
40.11	Set a quartzite stone 18 x 9 x 5 ins. 12 ins. in the ground for 1/4 sec. cor. marked "low N. face"; raised

Subdivisions of T. 10 S. R. 2 E.

chains	a mound of stones 2 ft. base 1½ ft. high N. of cor. Pitt imperceptible
60.15	Head of ravine 200 ft. deep course N. 70° W. Ascending gradually on N. slope to The cor. of secs. 5-6-7 and 8
—	80.22 This cor. stands about 2000 ft below top of divide Land mountainous steep and broken soil rocky and gravelly 4th rate Timber, aspens and scattering pine, mostly small size: dense oak brush on W. half. Mountainous land 8022 chs.
5,000	October 18, 1898 at 2:45:2 nd p.m., I set off 39° 59' N on the lat. arc. 9° 52' S on the decl. arc and determine a true meridian with the solar at the cor. of secs. 5-6-7 and 8; thence I run West on a random line bet. sec. 6 and 7
5,000	Search was made for the 1/4 sec. cor. but it could not be found
80.12	Intersect N. bdy. of Tp. at cor. of secs. 1-6-7 and 12 which is a stone firmly set marked and situated as described by the surveyor general Thence I run
4,000	East on a reserve line bet. sec. 5 and 6 A close search was made for the 1/4 sec. cor. as described by the surveyor general but no trace of it could be found within a radius of 3.00 chs.
51.75	set a schist-granite stone 18×8×6 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face raised a mound of stones 2 ft. base 1½ ft. high N. of cor. Pitt imperceptible
70.25	Thence I run East on a tree line bet. E half of sec. 6 and 7 On mountainous land Ascending on steep broken slope, in dense brush Top of spur 310 ft above 1/4 sec. cor. course N. 60° W
80.12	Descending to Bottom of gully 300 ft deep course N. 57° W. Begin ascent The cor. of secs. 5-6-7 and 8

Subdivision of T 10 S R 2 E

chains This cor. stands about 800 ft above the 1/4 sec. cor.
Land mountainous very steep and broken
soil gravelly and rocky 3rd and 4th rate
No timber: dense oak brush
Mountainous land 40/12 chs. -

October 18, 1898

October 19, 1898 At 8450 m. a. m. I set off 39°
59' N on the latitude 10° 08' S on the declination and
determine a true meridian with the solar at the
cor. of secs. 5-6-7 and 8 Thence 0 run
N 0° 3' W on a random line bet. secs. 5 and 6
set temp. 94 sec. cor.

82,11 Directed N. bdy. of Tp. 25 chs. W. of cor of secs.
5-6-31 and 32 which is a stone firmly set
marked and witnessed as described by the
surveyor general
Thence 0 run
S 0° 8' W on a true line bet. secs. 5 and 6
On mountainous land

Ascending on broken slope
Top of spur N. 75° W.
Begin descent

616 Stream 2 chs wide in bottom of ravine 90 ft. deep
courses N. 70° W.
ascending: enter oak brush

1200 Top of slope bears E and W: enter bench sloping W.
Bottom of ravine 60 ft deep courses N. 65° W and
beginning of ascent

42,11 Set a schist-granite stone 18 x 9 x 7 ins. 12 ins in
the ground for 1/4 sec. cor. marked 1/4 sec. W. face:
raised a mound of stones 2 ft. base 1 1/2 ft. high
W. of cor. Pile impracticable
This cor. stands on top of a spur running N. 70° W.
from divide
Begin descent

69,66 Bottom of gully 300 ft deep courses N. 66° W.: descending
The cor. of secs. 5-6-7 and 8.
Land Mountainous very broken
soil gravelly and rocky 3rd rate
No timber: dense oak brush undergrowth

Subdivision of T. 10 S. R. 2 E.

chains	Mountainous land 82.11 chs.
	From the cor. of sec. 5-6-31 and 32 on N. bdy. of Tp. as already described I sight a flag on the cor. of Tps. 9 and 10 S R.S 1 and 2 E which is a stone firmly set marked and witnessed as described by the surveyor general. - Thence 0 run S. 88° 24' W. on retracement line on N. bdy sec. 6
80.14	The cor. of Tps. 9 and 10 S R.S 1 and 2 E as hereinbefore described
78.16	From the cor. of sec. 1-6-7 and 12 on N. bdy of Tp. as hereinbefore described 0 run South on retracement line on N. bdy sec. 7. Intersect cor. of sec. 1-7-12-13, and 18 as hereinbefore described. -
81.04	S. 0° 6' E. on W. bdy sec. 18 Intersect the cor. of sec. 13 and 24 T10S.R1.E as hereinbefore described. -
81.30	S 0° 6' E on W. bdy sec. 19 Intersect the cor. of sec. 19-24-25 and 30 as hereinbefore described

General Description

This township is all mountainous land with the exception of a very small strip of bench land along the western edge; it is very broken and rough, and the soil is mostly rocky, or gravel and boulders, and only a few patches of fertile soil is to be found, which owing to the high elevation and broken surface, is not suitable for cultivation. - The bench land has a hard gravelly soil but may produce crops by irrigation. -

Pine and aspen timber is found scattering and in bunches over the greater portion of the township but is mostly of small size and

Subdivision of T 10 S R 26.

very little timber is found, of commercial value. -

The whole township is covered with a dense and rank growth of underbrush, of scrub oak, thorn, ash, and maple. -

There are no quarries nor mines though some prospecting for silver-bearing ore has been done in the N.W. cor. of the township but without favorable results, nor are there indications for mineral favorable. -

The headwaters of Payson Creek are within this township and it is also traversed by Summit Creek, and small springs and streams abound, and all, worked with proper care, furnish excellent summer pasture lands. -

There are no permanent settlers within the township nor any improvements to mention. -

Andrew P. Johnson
U.S. Deputy Surveyor.

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Final Oaths of Deputy Surveyor and his Assistants.

LIST OF NAMES.

A list of the names of the individuals employed by Andrew P. Hansen, United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of the subdivision lines of Tp 10 S R 2 E of the Salt Lake & Ogden Land District, Utah, showing the respective capacities in which they acted:

Kenji Butterfield, Chainman.
Harmon Okander, Chainman.
Kenji Butterfield, Moundman.
Harmon Okander, Moundman.
Harmon Okander, Axman.
Harmon Okander, Axman.
Harmon Okander, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Andrew P. Hansen, United States Deputy Surveyor, in surveying all those parts or portions of the subdivision lines of Tp 10 S R 2 E,

of the Salt Lake base and meridian, State of Utah, which are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor General for Utah.

Kenji Butterfield, Chainman.
Kenji Butterfield, Moundman.
Harmon Okander, Moundman.
Harmon Okander, Axman.
Harmon Okander, Axman.
Harmon Okander, Flagman.

Subscribed and sworn to before me this 24th day of October, 1898 }



Thomas B. Heslin
Notary Public
My commission expires December 31st, 1900.

Final Oath of United States Deputy Surveyor.

I, _____, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from _____, United States Surveyor General for _____, bearing date of the _____ day of _____, 189_____, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for _____, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of _____

_____ of the _____ base and _____ meridian, in the _____ of _____, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for _____ and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey; and should any fraud be detected, I will suffer the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

Andrew T. Hanson
United States Deputy Surveyor.

Subscribed by said _____, and sworn to before me this }
day of _____, 189_____ }



APPROVAL.

Office of the United States Surveyor General,

Salisbury, N.C. May 5th 1900

The foregoing field notes of the survey of ~~the subdivision of Township 10 North~~
~~Range East of the Salt Lake Base Meridian, Utah~~

executed by *Andrew T. Hanson*
under his contract No. 220, dated *April 1st*, 189_____, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Jacob B. Blain
United States Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in _____, has been correctly copied from the original notes on file in this office.

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BOOK A-256

FIELD NOTES

OF THE SURVEY OF

South and West BoundariesofTownship N^o. 39 South Range N^o. 9 West

Of the Salt Lake Base and Meridian,

Utah

AS SURVEYED BY

Andrew P. Hansen, United States Deputy Surveyor,Under his Contract No. 220, dated April 1st, 1898

Survey commenced October 27, 1898

Survey completed Nov 1st, 1898

6-161

S - Policy - High 6-00-77 ✓
 W - " " High 5-79-22 ✓

Names and Duties of Assistants.

Henry E. Ginn. Chairman

Thomas E. Yours

John Gardell Alexander Flaginard

Henry E. Ginn - - - - -

For preliminary official work "B"

BOOK A-256

INDEX DIAGRAM.

Township , *Range*

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Meanders Page.....

Preliminary Oaths of Assistants.

We, _____ and _____
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of _____

_____, Chainman.

_____, Chainman.

Subscribed and sworn to before me this _____
day of _____, 189 }



We, _____ and _____
do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of _____

_____, Moundman.

_____, Moundman.

Subscribed and sworn to before me this _____
day of _____, 189 }



We, _____ and _____
do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey of _____

_____, Axman.

_____, Axman.

Subscribed and sworn to before me this _____
day of _____, 189 }



I, _____, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of _____

_____, Flagman.

Subscribed and sworn to before me this _____
day of _____, 189 }



South Boundary of T. 39 S R 9 W.

chains

Survey commenced October 27, 1898 and executed with a Gurley light mountain transit with solar attachment. - The horizontal limb is provided with two double verniers placed opposite each other, reading to single minutes, or are which is also the least count of the verniers of the latitude and declination arcs. -

The instrument was examined, tested on the true meridian at Salt Lake found correct and was approved by the surveyor general for Utah August 23, 1898.

I examined the adjustments of the transit and correct the level and collimation errors; then to test the solar apparatus by comparing its indications resulting from solar observations made during a.m. and p.m. hours with a true meridian determined by observations on Polaris I proceed as follows. -

October 27, 1898 at the cor. of Twp. 39 and 40 S. R. 8 and 9 W. latitude $37^{\circ} 23' N.$ longitude $112^{\circ} 46' W.$ at $3^{\text{h}} 42^{\text{m}}$ p.m., I set off $37^{\circ} 23'$ on the lat. arc $13^{\circ} 01' S.$ on the decl. arc and determine with the solar at true meridian, and mark a point thereof on a stake set firmly in the ground 4 chs. N. of the cor. -

October 27, 1898

October 28: At $4^{\text{h}} 50^{\text{m}}$ a.m. I observe Polaris at western elongation in accordance with Manual of Instructions and mark a point on the line thus determined in a spike driven in the ground 4 ch. S. of my station. -

At $7^{\text{h}} 12^{\text{m}}$ a.m., I set off the azimuth of Polaris $1^{\circ} 35' S.$ to the east and mark the true meridian thus determined by a spike driven in the stake set October 27, 4:00 a.m. S. of my station, on which the true meridian falls 0.33 ins. west of the mark determined by the solar. At $7^{\text{h}} 50^{\text{m}}$ a.m., I set off $37^{\circ} 23'$ on the lat. arc $13^{\circ} 14' S.$ on the decl. arc and mark a point in the true meridian determined with the solar by a spike driven in the stake already set 4:00 a.m.

South Boundary of T 39 S R 9 W

chains	<p>of my station: this mark falls 0.37 ins. west of the true meridian established by Polaris observation. The solar apparatus by p.m. and a.m. observations define position for true meridians within 1' east or west of the true meridian established by Polaris observation which is the least angle of the horizontal limb; therefore (conclude) the adjustments of the instrument are satisfactory. -</p> <p>The magnetic bearing of the true meridian at 8 h 0 m a.m. is $15^{\circ}34'$ W the angle thus determined reduced by the table page 100 gives the mean mag. decl. $15^{\circ}31'$ E. -</p> <p>I begin at the cor. of Tps 39 and 40 S R 8 and 9 W which is a stone firmly set marked and witnessed as described by the surveyor general Thenell I run</p> <p style="text-align: center;">+</p> <p>West bet. sec. 1 and 36</p> <p>On mountainous land</p> <p>Ascending gradually on high rolling plateau</p> <p>In scattering timber</p>
14,50	<p>Top of ridge 100 ft. high bears N. and S.</p> <p>Begin descent</p>
31,00	<p>Edge of canon bears 5.15° E. and S. 15° W.</p> <p>Begin steep descent</p>
40,00	<p>Set a sandstone 18 x 10 x 8 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face from which a pine tree 18 ins. diam. bears $13^{\circ}30'$ E 53 lbs. dist. marked 1/4 S. 36 BT. -</p> <p>No other trees within limit: raised a mound of stones 2 ft. base 15 ft high N. of cor. -</p> <p>Pits impracticable. -</p>
41,25	<p>Bottome of rocky canon 350 ft. deep course 5.15° E</p> <p>Begin abrupt, broken ascent</p>
58,50	<p>Top of plateau and low ridge, course N. and S.</p> <p>Begin descent</p>
61,54	<p>Dry wash in head of canon 70 ft. deep. course 5.20° E</p> <p>Ascending gradually to</p>
- 8,000	<p>Set a sandstone 18 x 9 x 6 ins. 12 ins. in the ground for cor. of sec. 1-2-35 and 36 marked with 1 notch on E and 5 notches on N. edges: from which a pine tree 12 ins. diam. bears N. 10° E 50 lbs. dist.</p>

South Boundary of T 39 S 129 W.

chains	<p>marked T. 39 S. 12. 9 W. S 36 B.T. A fine tree 18 ins. diam. bears S 40° 30' W. 96 elev. dist. marked T. 40 S. 12. 9 W. S. 2 B.T. No other trees within limit; raised as mound of stones 2 ft base 1½ ft high N. of cor. - <i>Pits impracticable</i> This cor. stands on top of plateau on low ridge running N. and S. Land mountainous high broken plateau Soil sandy and rocky 3rd and 4th rates Timbers fine of large size but thin scattering growth. - Mountainous land 8,000 chs. -</p>
	<p>West bet. sec. 2 and 35 - On mountainous land Descending gradually in rolling plateau In scattering timber Begin steep rocky descent course N. and S. Bottom of rocky ravine 300 ft. deep course S. Begin steep ascent</p>
7,00	Top of ascent and ridge running N. and S.
10,50	Bottom of rocky ravine 300 ft. deep course S.
30,00	Begin steep ascent
37,00	Top of perpendicular sandstone break 90 ft. deep course N. and S.
37,20	Foot of break and beginning of descent in boulders and sand
40,00	Set a sandstone 26 x 10 x 5 ins. 19 ins. in the ground for 1/4 sec. cor. marked 1/4 ord N. face; raised as mound of stones 2 ft. base 1½ ft high N. of cor. - <i>Pits impracticable</i>
48,00	Slope becomes gradual and boulders
74,50	Enter timber; and begin steep descent course N. and S.
8,000	Set a sandstone 18 x 10 x 8 ins. 12 ins. in the ground for cor. of secs. 2-3-34 and 35 marked with 2 notches on E. and 4 notches on W. edges; from which
	<p>A fine tree 11 ins. diam. bears S 72° 16' W. 14 elev. dist. marked T. 40 S. R 9 W. S. 3 B.T.</p> <p>A fine tree 5 ins. diam. bears S 52° 40' W. 27 elev. dist marked T. 39 S. R 9 W. S. 34. B.T.</p>

South Boundary of T. 39 S. R. 9 W.

chains	<p>A pine tree 6 in. diam. burns at 42°45' E. 5°5' S. the dist. marked T. 39 S. R. 9 W. S. 35 D. T.</p> <p>No other trees within limit; raised a mound of stones 2 ft. base 1½ ft. high N. of cor. - Pitt impracticable</p> <p>This cor. stands about 1400 ft. below cor. of sec. 1-2-35 and 36</p> <p>Land mountainous very broken soil rocky and sandy 4th rate Timber pine, of small size and scattering growth - mountainous land 8000 chs.</p> <p>October 28, 1898: The sky being overcast during the noon hours I could not observe the sun on the meridian --</p>
13,700	<p>West bet. secs. 3 and 34</p> <p>On mountainous land</p> <p>Descending on steep slope</p> <p>In scattering timber</p> <p>Slope becomes less steep, and broken</p> <p>Leads timber, and ends heavy brush</p>
24,500	<p>Bottom of ravine cornered N. 27° E. 450 ft below cor.</p> <p>Begins ascent on gradual broken slope</p>
40,000	<p>Set a sandstone 18×8×6 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 over st. face; raised a mound of stones 2 ft. base 1½ ft. high N. of cor.</p> <p>Pitt impracticable</p>
47,000	<p>Top of spur N. 230 ft above ravine</p> <p>Begins descent on broken slope</p>
77,300	<p>Bottom corner, near its head, corner at 330 ft. below top of spur</p> <p>Begins ascent</p>
8,000	<p>Set a sandstone 18×7×6 ins. 12 ins. in the ground for cor. of secs. 3-4-33 and 34 marked with 3 notches on E. and W. edges; raised a mound of stones 2 ft. base 1½ ft high N. of cor. -</p> <p>Pitt impracticable</p> <p>Land mountainous broken and rolling soil gravelly and rocky 4th rate</p> <p>No timber; dense thorn and oak brush</p> <p>mountainous land 8000 chs. -</p>

South Boundary of T. 39 S. R. 9 W.

chain	West bch. secs. 4 and 33 On mountainous land
8,90	Ascending, on broken slope in dense brush Top of spur N. 180 ft. above cor. Begin descent
10,60	Bottom of ravine 50 ft. deep, course N. Begin ascent
13,40	Top of spur N 10° W. Begin descent
21,40	Bottom of ravine 200 ft. deep, course N 12° W. Begin ascent
28,00	Top of spur N 15° W and beginning of descent
40,00	A stationary limestone rock 4 x 4 x 3 ft. above ground for 1/4 sec. cor. marked 14 on N. face; raised a mound of stones 2 ft. base 1 1/2 ft. high N. of cor. Pili impracticable
	This cor. stands in the bottom a narrow ravine 210 ft. deep, course N. 15° W
45,75	Then ascending to Top of spur N. and beginning of descent on gradual broken slope 110 ft. above cor.
6,000	Begin steep descent on loose sandy soil on bank of cañon course N. and S. Entered scattering pine timber
70,65	Bottom of ravine 600 ft. deep, course N. W. Begin ascent
80,00	Set a sandstone 28 x 10 x 5 in. 20 in. in the ground for cor. of secs. 4-6-32 and 33 marked with 4 notches on E and 2 notches on W. edges from which A cedar tree 6 in. diam. bears N 12° 14' E 13 ft. H. dist. marked T. 39 S. R. 9 W. S. 33 B. T. A cedar tree 8 in. diam. bears S. 20° 35' E. 38' ft. dist. marked T. 40 S. R. 9 W. S. 4 B. T. No other trees within limit: raised a mound of stones 2 ft. base 1 1/2 ft. high N. of cor. - Pili impracticable
	This cor. stands on 1/4 of a spur running N. 100 ft. high, Land mountainous very rugged soil gravelly sandy and rocky 4 ft. max

South Boundary of T. 39 S. R. 9 W.

Date

Timber fine and cedar of scrubby and
scattered growth -
Monotonous land 800 ft. elev.

October 28, 1895

	October 29, 1895 Date
11.20	West sec. 3 and 32
	On monotonous land
	Descending on steep sandy slope
	On timber
12.20	Bottom of ravine 200 ft. deep covered N.
	According to
14.00	Top of spur N. and beginning of descent
22.20	Bottom of ravine 250 ft. deep covered N.
	Begin ascent
25.15	Top of spur N.
	Begin descent on broken slope to
40.00	rock or limestone 18 x 8 x 6 ins. 12 ins. in the ground for 1/4 sec. cov. marked 14 and N. face raised as mound of shales 2 ft. base 1 1/2 ft. high N. of cov. Pits impracticable
45.35	Bottom of ravine 300 ft. deep covered N.
	Begin ascent
57.20	Top of spur N. and beginning of descent
	Cov. perpendicular closed
63.05	Bottom of canon of North Fork of Virgin River. about 400 ft. deep. covered S. 30° E.
67.35	Begin abrupt ascent on rocky ledge
	Leave bottom of canon covered S. 75° E.
75.75	Top of spur N. 250 ft. high
	Begin descent to
78.32	Edge of perpendicular sandstone break 20 ft. deep base 2 ft. and N. E.
78.42	Bottom of canon of North Fork
79.80	S. bank of North Fork covered W.
80.00	On stationary sandstone rock 3' 4" x 5' ft. above ground for cov. of sec. 32-6-31 and 32 marked with 3 molches 16 and 1 molche on N. edges with a cov. 4 ins. diam., on the top side near easton fine white oak pine tree 12 ins. diam. basis 3' 4" x 2' 7 1/2 ins. ditch revealed T. 40 S. 18. 9 W. Q. C. B.T.

South-Boundary of T. 39 S. R. 9 W.

chains.	a pine tree 11 in. diam. bears N 78° 15' E. 79 Mer. dist. marked T 39 S 19 W S. 32 E.T. No other trees within limit; raised a mound of stones 2 ft. base 15 ft. high N. of cor. Pits impracticable Land mountainous very rugged soil rocky and sandy 45% slate Timber fine of good size but scattering Mountainous land 8,000 chs. —
0.74	West beh. sec. 6 and 31.
3.80	On mountainous land
5.10	In bottoms of North Forks Canons; in timber and dense brush
14.60	Forti turns N. 65° W
32.00	Begin abrupt ascent; leave bottom of canon course N 70° W
32.70	Top of rocky, precipitous slope bears N 70° W and S 70° E
40.00	Begin gradual ascent on edge of canon
55.45	Top of rocky point breaking N. W. canon
66.70	Begin descent
71.00	Bottom of ravine 250 ft. deep course N. 20° W.
79.45	Begin ascent
80.77	Set a sandstone rock 10 x 9 x 6 ins. 12 ins. in the ground for 14 sec. cor. marked 1/4 on N. face; raised a mound of stones 2 ft. base 15 ft. high N. of cor. Pits impracticable
	Top of rocky point breaking N. W. canon, 350 ft. high
	Begin descent
	Bottom of ravine 300 ft. deep course N. 20° W
	Begin abrupt ascent
	Top of slope bears N. W. ! thence on break of canon to
	Set a temporary cor. of Tps. 39 and 40 S. R. 9 and 10 W.
	The permanent cor. of Tps. 39 and 40 S. R. 9 and 10 W (for description see W. H. D.)
	Land: mountainous very rugged soil rocky and sandy 45% slate Timber fine of good size, but scattering

South Boundary of T. 39 S. R. 9 W.

Chain	<p>Mountainous land 80.77 chs. October 29, 1898: The weather being cloudy I could not observe the sun on the meridian</p> <hr/> <p>October 29, 1898 at 2430 m.p.m. I set off $37^{\circ} 23'$ on the lat. arc $13^{\circ} 40'$ S. on the decl. arc and determine a true meridian with the solar at the limb. cor. of Tps. 39 and 40 S. RS 9 and 10 W. Then I run</p> <p>North on a random line along N. bdy. of Tp. 39 S. R. 9 W. setting time $\frac{1}{4}$ sec. and sec. corr. at intervals of 4000 chs. and at 479.28 chs. intersect N. bdy. of Tp. 132 bds. E. of cor. of Tps. 38 and 39 S RS 9 and 10 W. which is a stone firmly set marked and witnessed as described by the surveyor general</p>
	<i>October 30, 1898</i>
	<p>October 31, 1898 at 8$\frac{1}{2}$ 10 a.m. I set off $37^{\circ} 28'$ on the lat. arc $14^{\circ} 13'$ S. on the decl. arc and determine a true meridian with the solar at the cor. of Tps. 38 and 39 S. RS 9 and 10 W. Then in accordance with special instructions I run</p> <p>South - bet. secs. 1 and 6</p> <p>On mountainous land</p> <p>Ascending gradually on broken w. slope, in dense oak brush and scattering trees</p>
30,35	Spring branch 3 chs. wide course S.W.
39,28	Set a sandstone 18x10x9 ins. 12 ins. in the ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on N. face; raised a mound of stones 2 ft. base $1\frac{1}{2}$ ft high N. of cor. Pits impracticable
60,60	Ravine 40 ft deep course w.
65,00	Top of spwt W. 70 ft high and 200 ft above Tp. cor.
	Begin gradual descent - w. slope
79,28	Set a sandstone 18x7x6 ins. 12 ins. in the ground for cor. of secs. 1-6-7 and 12 marked with 1 notch on N. and 5 notches on S. edges; raised a mound of stones 2 ft base $1\frac{1}{2}$ ft high N. of cor.

N.W. Boundary of T. 38 S. R. 9 W.

chains	Pits impracticable. Land mountainous, broken slopes soil gravelly and rocky 4 ft. rate - Timber, a few scattering pine trees on st. 1/2 mile Dense oak brush the whole distance Mountainous land 79.28 chs.
2000	South. bet. sec. 7 and 12 On mountainous land Descending on broken slope, in dense oak brush Enter timber bears E. and W.
29,36	Streams 4 ft. wide in bottom of narrow gulch 300 ft below cor. course S. W.
4,000	Leave timber, and ascend in brush Set a black lava rock 18x9x8 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face; raised a mound of stones 2 ft. base 1 1/2 ft. high W. of cor. Pits impracticable
6,000	Enter bed of large lava boulders course N. E. and S. W.
7,140	Precipitous ledge of lava rock 40 ft. high bears N. E. and S. W.
7,150	Top of sharp ridge bears N. E. and S. W. and breaks abruptly S. W. in 75 ft. - about 580 ft. above gulch
7,650	Begins descent on steep lava boulder slope Dry wash and bottom of gulch course W 300 ft below top of ridge
8,000	Leave lava slide and begin ascent Set a black lava rock 18x10x7 ins. 12 ins. in the ground for cor. of sec. 7-12-13 and 18 marked with 2 notches on N. and 4 notches on S. edges; raised a mound of stones 2 ft. base 1 1/2 ft. high W. of cor. Pits impracticable Land mountainous very broken soil gravelly and rocky 4 ft. rate Timber scrubby cedar. - Dense oak brush Mountainous land 80.00 chs. -
	October 31, 1898 at this cor. I set off 14° 18' S. on the decl. arc. and at 11 ^h 44 ^m a.m., I just observed the sun on the meridian the resulting latitude is

West Boundary of T. 39 S. R. 9 W.

chain	37° 26' 30" N
16,00	<p>South - bet. secs. 13 and 18 On mountainous land Ascending on broken, s. w. slope, in dense oak brush Top of spur N. 300 ft. above cor. Begin descent on rolling surface</p>
36,50	<p>Ravine 40 ft. deep, courses N. Set as sandstone 18 x 10 x 8 ins. 12 ins. in the ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on N. face</p>
40,00	<p>Raised a mound of stones 2 ft. base 1$\frac{1}{2}$ ft. high N. of cor. Pit impracticable</p>
64,35	<p>Ravine 60 ft. deep and bottom of slope 250 ft. below spur - drains N. Begin ascent in scattering timber</p>
80,00	<p>Set as sandstone 18 x 8 x 6 ins. 12 ins. in the ground for cor. of secs. 13-18-19 and 24 marked with 3 notches on E. and S. edges; from which a pine tree 4 ft. diam. bears S 87° 38' E. 1,26 chs. dist. marked T 39 S R 9 W. S. 19 B.T. No other trees within limit; raised a mound of stones 2 ft. base 1$\frac{1}{2}$ ft. high N. of cor. - Pit impracticable. - Land mountainous, broken and rolling Soil gravelly, rocky and sandy 3rd and 4th note Timber fine of large size, but very scattering Dense oak brush Mountainous land 8,000 chs</p>
11,00	<p>South - bet. secs. 19 and 24 On mountainous land Ascending on S. W. slope In scattering fine timber and oak brush Top of spur N. 340 ft. above cor. Begin descent</p>
24,50	<p>Bottom of ravine 250 ft. deep, courses N. Begin ascent, on sand, and boulders</p>
40,00	<p>Set as sandstone 18 x 7 x 6 ins. 12 ins. in the ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on N. face; from which a pine tree 10 ins. diam. bears N. 45° 30' E. 79 chs. dist. marked $\frac{1}{4}$ S. 19 B.T.</p>

West Boundary of T 39 S R 9 W.

chains.	No other trees within limit; raised a mound of stones 2 ft. base 1½ ft. high W. of cor. Pili impracticable
47.00	Thence over W. slope in low sand and boulders Top of spur S. 60° W. from bank of plateau 450 ft. above ravine.
	Begin descent over S. slope
80.00	Set a sandstone 18 x 9 x 8 in. 12 in. in the ground for cor. of secs. 19-24-25 and 30 marked with 4 notches on N. and 2 notches on S. edges, from which
	A cedar tree 11 in. diam. bears S 50° 25' E 19 dist. dist. marked T 39 S R 9 W. S. 30 B.T.
	A piñon tree 6 in. diam. bears S 35° 4' W 36 dist. dist. marked T 39 S 19 W. S. 25 B.T.
	A piñon tree 14 in. diam. bears N 16° 1' E 34 dist. dist. marked T 39 S R 9 W. S 19 B.T.
	A piñon tree 24 in. diam. bears N. 68° 10' W 80 dist. dist. marked T 39 S R 10 W. S 24 B.T.
	Raised a mound of stones 2 ft. base 1½ ft. high W. of cor. - This cor. stands 800 ft below top of spur. Land mountainous very rugged soil sandy and rocky 4 th rate
	Timber, scrubby piñon and cedar, and a few large pine trees
	Mountainous land 80,000 chs.
	October 31, 1898

November 1, 1898, at 8:45 a.m., I went out off 37° 24' 30" from the lat. and 14° 32' S. on the decl. and determine a true meridians with the solar at the cor. of secs. 19-24-25 and 30.

Then I went

South bet. secs. 25 and 30

On mountainous land

Descending on broken slope in timber

dry wash course S.W.

Begin ascent

Top of spur 50 ft. course S.W.

Begin descent

West Boundary of T 39 S 189 W.

chains	
4,00	Head of gulch N. 100 ft deep -
	ascending and level timber, course E. and W.
8,00	Top of spur N. 80 ft above gulch
	Begin descent on rolling, broken surface
37,00	Head of gulch course S.W. 350 ft below spur
	Begin ascent on W. slope
40,00	Set a sandstone 18 X 9 X 6 in. 12 in. in the ground for 1/4 sec. cor. marked 1/4 on W. face; raised a mound of stones 2 ft base 1 1/2 ft. high W. of cor. - Pit impracticable
43,00	Top of spur S.W. 100 ft high
	Begin descent on broken slope
80,00	Set a sandstone 18 X 10 X 6 in. 12 in. in the ground for cor. of secs. 25-30-31 and 36 marked with 6 switches on N. and 1 switch on S. edges; raised a mound of stones 2 ft base 1 1/2 ft. high W. of cor. - Pit impracticable. Land mountainous very broken Soil gravelly and rocky 4 ft. rate Timber scrubby cedar and juniper Dense oak brush Mountainous land 80,00 cha. -
	South - bet. secs. 31 and 36
	On mountainous land
	Descending on broken slopes
6,00	Head of gulch course S.E.: thence on S.E. slope
	Enter timber course E. and W.
23,00	Bottom of same gulch course S. 23° W 400 ft below cor.
	Begin ascent
30,10	Top of spur S.W. 100 ft. high on beginning of descent on broken slope
	Leave timber
40,00	Set a sandstone 18 X 9 X 6 in. 12 in. in the ground for 1/4 sec. cor. marked 1/4 on W. face; raised a mound of stones 2 ft base 1 1/2 ft. high W. of cor. - Pit impracticable
54,00	Enter pine timber course E. and W.
72,12	Edge of canon of North Fork of Virgin River course

West Boundary of T. 39 S. R. 9 W.

chains	S. 86° W. having perpendicular walls 400 ft. deep and can not be measured by ordinary means therefore Cause a flag to be set due south of my station and west of the temp. cor. of Tps 39 and 40 S. R. 9 and 10 W. and measure a base line west 6.10 chs. to a point where the flag bears S 37° 45' E. Therefore tan. 52° 16' x base or 1.2915 x 6.10 = 7.88 chs., the distance to flag; which added to 72.12 makes
8000'	Intersect S. bdy. of Tp. 39 S. R. 10 W. at 132 chs. N. of temp. cor. of Tps 39 and 40 S. R. 9 and 10 W. set by me October 29, 1898. - The S. bdy. of sec. 31 is therefore $79.45 + 132 = 80.77$ chs. Set a sandstone 18 x 9 x 8 ins. 12 ins. in the ground for cor. of Tps. 39 and 40 S. R. 9 and 10 W. marked 39 S. on N.E. 40 S. on S.W. 9 W. on S.E. and 10 W. on N.W. faces with 6 notches on each edge; raised a mound of stones 2 ft. base 1½ ft high S. of cor. - Pili inferascible This cor. stands 65 chs. S. of the edge of the canon and about 4,000 chs. S. of North Fork in 900 ft below cor. of secs. 26-30-31 and 36 Land mountainous very rugged Soil gravelly and rocky 4½ mato Timber, cedar and pine of small size mostly Mountainous land 8,000 chs. -

November 1, 1898

Boundaries of T. 39 S. R. 9 W.
Latitude Decartes and closing errors

Line designated	True bearing	Distance	Latitude		Departure	
			N.	S.	E.	W.
East boundary	North	chs. 479.00	chs. 479.00			
South "	West	480.77				480.77
West "	South	479.28		479.28		
North "	588° 22' E	81.87			2.33	81.84
" "	East	80.00			80.00	X
" "	189° 22' E	80.00	0.88		80.00	X
" "	189° 05' E	87.41	1.30		81.40	X

Exterior of Tp. 39 S.R. 9. W.

Line designated	True bearing	Distance chn.	Latitude		Departure	
			N chn.	E 2.00	E 77.50	n chn.
North Boundary	588°31' E	77.52				
" "	489°17' E	79.71	1.00		79.70	
Convergence	- - -	- - -	482.18	483.61	480.95	480.77
Total.	- - -	- - -	482.18	482.18	480.77	
Errors in Lat. and Dep.					1.43.....22	W

General Description

This township is all mountainous land very rough and broken. The soil is rocky and gravelly and not suited for cultivation of crops excepting along the North Fork in the eastern part where there are small patches of tillable land. -

There is a small amount of good timber in the township. -

Andrew P Hanson

U.S. Deputy Surveyor

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Final Oaths of Deputy Surveyor and his Assistants.

LIST OF NAMES

A list of the names of the individuals employed by

, United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of .

showing the respective capacities in which they acted.

Chairman.

Chairman.

Moundman.

Moundman.

Arman.

Axman.

FINAL OATH OF ASSISTANTS

We hereby certify that we assisted

, United States Deputy Surveyor, in surveying all those parts or portions of the

and _____ meridian, _____ of _____, which are represented
in the foregoing field notes as having been surveyed by him and under his direction; and that said survey
has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the
corner monuments established, according to the instructions furnished by the United States Surveyor
General for

Chairman

Chairman.

Houndman.

Soundman.

Lixman.

Axman.

Flagman.

Subscribed and sworn to before me this _____
day of _____, 189_____

SEAL

Final Oath of United States Deputy Surveyor.

I, , United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from , bearing date of the United States Surveyor General for , I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for , the Manual of Surveying Instructions, and the Laws of the United States, surveyed all those parts or portions of

..... of the land
and meridian, in the of which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey; and should any fraud be detected, I will suffer the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

Andrew P. Johnson
United States Deputy Surveyor.

Subscribed by said _____, and sworn to before me this
_____ day of _____, 189_____. {

COULD
O SEAL O
COULD

APPROVAL.

Office of the United States Surveyor General.

Office of the United States Surveyor General.
Salisbury City, May 5th 1900
The foregoing field notes of the survey of the ~~East~~^{North} & ~~West~~^{South} boundaries of the
Sectⁿ R^g W. of the said Lake Maw & Mowidewa, Mass.

executed by *Andrew J. Farwell*,
under his contract No. 220, dated August 1, 1892, having been
critically examined, and the necessary corrections and explanations made, the said field notes, and the
surveys they describe, are hereby approved.

Jacob B. Blodard
United States Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in
....., has been correctly copied from the original notes on file in this office.

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Examiner

4-679.

BOOK A-256

FIELD NOTES

OF THE SURVEY OF

Subdivision Lines

of

Township No. 39 South, Range No. 9 West

Of the Salt Lake Base and Meridian,

Utah

AS SURVEYED BY

Andrew P. Hanson, United States Deputy Surveyor,

Under his Contract No. 220, dated April 1, 1898

Survey commenced November 1, 1898

Survey completed November 19, 1898

6-151

Sals - High 59-69-48 ✓ 59 72-33
" low 2-85 ✓
" closing 6-45 ✓

N. Baley County - 1-01-87 ✓
S - " do 3-78-64 ✓

Names and Duties of Assistants.

Henry E. Ginn Chairman

Thomas E. Lyon " "

John Gardell Assistant Chairman

Henry E. Ginn Record-keeper

In preliminary office, see book "C"

BOOK A-256

INDEX DIAGRAM.

Township , *Range*

6	5	4	3	2	1
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19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

Meanders Page.....

Preliminary Oaths of Assistants.

WE, _____ and _____
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of _____

, Chainman.

, Chainman.

Subscribed and sworn to before me this _____ }
day of _____, 189 }



WE, _____ and _____
do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of _____

, Moundman.

, Moundman.

Subscribed and sworn to before me this _____ }
day of _____, 189 }



WE, _____ and _____
do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey of _____

, Axman.

, Axman.

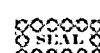
Subscribed and sworn to before me this _____ }
day of _____, 189 }



I, _____, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of _____

, Flagman.

Subscribed and sworn to before me this _____ }
day of _____, 189 }



Subdivision of T. 39 S. R. 9 W.

Chains

Survey commenced November 1, 1898 and executed with a Gurley light mountain transit with solar attachment. - The horizontal limb is provided with two double verniers placed opposite to each other reading to single minutes of arc, which is also the least count of the verniers of the latitude and declination axes.

The instrument was examined, tested on the true meridian at Salt Lake, found correct and was approved by the surveyor general for Utah August 23, 1898. I examine the adjustments of the transit and correct the level and collimation errors; then to test the solar apparatus by comparing its indications resulting from solar observations made during a.m. and p.m. hours with a true meridian determined by observation on Polaris I proceed as follows:

Near my camp in the N.W. 1/4 of sec. 34 T 39 S R 9 W.: latitude $37^{\circ}24'$ N longitude $112^{\circ}48'$ W. at 445 m p.m., l.m.t. I set off $37^{\circ}24'$ from the lat. arc $14^{\circ}39' 30''$ S. on the decl. arc and determine with the solar a true meridian and mark a point thereof on a stake firmly set in the ground 500 chs. N. of my station.

November 1, 1898

November 2, 1898 at 4⁴⁵ m a.m., l.m.t. I observed Polaris at western elongation in accordance with Manual of Instruction and mark a point in the line thus determined on a plug driven in the ground 500 chs. N. of my station.

At 7⁴⁵ m a.m., 2 m.t. I lay off the azimuth of Polaris $1^{\circ}33'$ to the east and mark a point in the true meridian thus determined by a tack driven in the stake set November 1, on which the true meridian agrees with the mark determined by the solar without material difference. -

At 8¹⁵ m a.m., 2 m.t. I set off $37^{\circ}24'$ from the lat. arc $14^{\circ}51' 30''$ S. on the decl. arc and mark a point in the true meridian determined with the solar on the stake already set 500 chs.

Subdivision of T. 39 S. R. 9 W.

chains	<p>at my station; this mark agrees with the true meridian established by observation and Polaris without material difference and I therefore conclude the adjustments of the instrument are accurate. -</p> <p>The magnetic bearing of the true meridian at 8^h20 m a.m. is N. 15° 35' W. the angle thus determined reduced by the table page 100 gives the mean mag. decl. 15° 32' E. -</p>
	<p>At the cor. of secs 1-2-35 and 36 on S. edge of T. 39 S. R. 9 W. at 9^h25 m., 2 m + 6 set off 37° 23' on the lat. arc 14° 53' " S. on the decl. arc and determine a true meridian with the solar. Thence I run</p> <p>N 0° 1' W. bet. secs. 35 and 36</p> <p>On mountainous land</p> <p>Descending gradually in rolling, high plateau</p> <p>On timbered, and brush undergrowth</p>
4670	<p>Set w sandstone 18 x 11 x 4 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face; from which a fine tree 32 ins. diam. bears S 30° 30' W. 6 dist. dist. marked 1/4 S. 36 B.T.</p> <p>A fine tree 30 ins. diam. bears S. 86° 6' E 35 dist. dist. marked 1/4 S. 36 B.T.</p> <p>Raised as mound of stones 2 ft base 15 ft. high W. of cor.</p> <p>This cor. stands in the bottom of a draw draining S. 60° W</p> <p>Begin gradual ascent</p>
69,20	<p>Top of slope bears E. and W.</p> <p>Leave in box course E. and W.</p> <p>Begin steep descent</p>
72,30	<p>Perpendicular precipice of gray sandstone 70 ft deep. - bears about E. and W.</p> <p>Descend abruptly W.</p>
72,36	<p>Top of precipice and beginning of steep descent in loose sand and boulders</p>
80,00	<p>Set w sandstone 28 x 8 x 7 ins. 21 ins. in the ground for cor. of secs. 25-26-35 and 36 marked with 1 notch on S. and E. edges; raised as mound of</p>

Subdivision of T. 39 S. 12.9 W.

chain	stones 2 ft. base 15 ft. high N. of cor. - Ridge impenetrable This cor. stands at foot of steep slope 400 ft below cor. on S. bdy. of Tp. Land mountainous, broken. soil sandy and rocky & sterile Timber pine of large size and fine quality Mountainous and heavily timbered land 80,000 cu. m.
40,00	East on a random line bet. secs. 25 and 36 set limpf. 1/4 sec. cor.
50,04	Intersect E. bdy. of Tp. 10 sec. N. of cor. of secs. 25- 30-31 and 36 which is a stone firmly set marked and witnessed as described by the surveyor-general Hence I run N. 89° 56' W. on a true line bet. secs. 25 and 36 On mountainous land Descending gradually on rolling plateau 80,000 cu. m.
40,02	Set a sandstone 18 x 9 x 6 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 sec. N. face: raised as mound of stones 2 ft. base 15 ft. high N. of cor. - Ridge impenetrable
40,00	Top break bears nearly N. and S.; begin descent on ledge and ridge
50,50	Bottom of ravine draining to 10 cor. at foot of ridge; 500 ft. below top of break Begin ascent in dense oak brush
55,60	Top of spur 20 ft. above ravine runs N. Hence on steep broken N. slope w-
80,04	The cor. of secs. 25-26-35 and 36 Land mountainous very rugged soil sandy, gravelly and rocky & sterile Timber pine of large size, but on W. side very scattering. - Mountainous and heavily timbered land 80,04 cu. m. November 2, 1898. The sky being overcast during the noon hour I could not observe the sun on the meridian

N 0° 1' W. bet. secs. 25 and 26

Subdivision of T 39 S 17 W.

chains	On mountainous land Descending, in heavy oak brush
12,60	Footh of Knoll bears N.E. and S.W. Begin ascent
16,40	Top of round Knoll 100 ft. high Begin descent
40,00	Set a sandstone 18 x 10 x 7 ins. 12 ins. in the ground for 14 sec. cor. marked 14 sec. W. face raised a mound of stones 2 ft. base 1 1/2 ft. high W. of cor. Pit impracticable
72,70	Bottom of narrow ravine 200 ft. deep, course W. Begin ascent on steep slope
74,60	Top of ravine and beginning of gradual descent
77,85	Beginning of steep descent, bears E. and W.
80,00	Set a sandstone 18 x 10 x 8 ins. 12 ins. in the ground for cor. of secs. 23-24-25 and 26 marked with 2 notches on S. and 1 notch on E. edge; raised a mound of stones 2 ft. base 1 1/2 ft. high W. of cor. Pit impracticable This cor. stands 800 ft. below the cor. of secs. 25-26 35 and 36
	Land mountainous steep and broken soil gravelly 3rd rate No timber! Dense oak brush Mountainous land 8,000 chs.-
	S 89° 5' 6" E. on a random line bet. secs. 24 and 25
40,00	set cor. 14 sec. cor.
79,86	Intersect E. boundary of Twp. 9 like N. of cor. of secs. 19-24- 25 and 30 which is a stone firmly set marked and witnessed as described by the surveyor general Three runs
	N 89° 5' 2" W. on a true line bet. secs. 24 and 25 on mountainous land
	Descending on broken slopes in timber
9,20	Bottom of ravine 150 ft. below cor. course S 60° W ascending to
19,50	Top of cliff S.W. 200 ft. high and beginning of descent on S.W. slope
39,40	Set wash 60 ft. deep course S. 25° W. Begin ascent

Subdivision of T. 39 S R 9 W

Chains	
39.93	Set a sandstone 18 x 10 x 6 ins. 12 ins. in the ground for 1/4 sec. com. marked 1/4 sec N. face; from which a cedar tree 12 ins. diam. bears $N 10^{\circ} 30' E$ 25 ltrs. dist marked 1/4 sec 24 B.T.
	A pine tree 13 ins. diam. bears $S 79^{\circ} 10' W$. 23 ltrs. dist marked 1/4 sec 25 B.T.
40.50	Top of spur 5 and beginning of descent on S.W. slope
62.00	Leave timber bears N.W. and S.E.
64.75	Stream 3 ltrs wide comes S. 75° W. in bottom of gulch 200 ft deep.
79.86	Thence on gradual descent, S. slopes to The cor. of secs. 23-24-25 and 26 This cor. stands 800 ft. below the cor. of secs. 19- 24-25 and 30 Land mountainous very broken Soil gravelly and rocky 4 ft. rate Timber pine and cedar, of fair quality Mountainous land 79.86 chs.

November 2, 1898

November 3, 1898 (cont)

N. 0° 1' W. bet. secs. 23 and 24

On mountainous land

Descending in brush undergrowth

Enter bottom of gulch course E. and W.

Stream 3 ltrs wide course W.

Leave bottom of gulch course E. and W.

Begin ascent on steep slope

Top of spur S 60° W 60 ft high

Begin descent on N.W. slope

North Fork of Virgin River 16 ltrs. wide swift current

course S.W. in bottom gulch 200 ft deep. around gradually

Road from Cedar City to North Fork bears S.W. and N.E.

Begin steep ascent. course S.E. and N.W. 150 ft above creek

Enter timber course E. and W.

Top of spur E. 300 ft. high

Begin descent

Spring branch 2 ltrs. wide course E. in bottom of ravine 150 ft below top of spur

Subdivision of T 39 S R 9 W

chans	Began gradual ascent on broken surface.
3620	Leave timber course E and W; enter dense oak brush
40,00	Spring branch 2 elev. wide course E Set w sandstone 18 x 8 x 7 ins. 12 ins. in the ground for cor. rec. cor. marked 1/4 on W. face; raised a mound of stones 2 ft. base 1 1/2 ft. high W. of cor. - Pith inferascible
- 8,000	Set w sandstone 18 x 8 x 6 ins. 12 ins. in the ground for cor. of recs. 13-14-23 and 24 marked with 3 notches on S. and 1 notch on E. edges; raised a mound of stones 2 ft. base 1 1/2 ft. high W. of cor. - Pith inferascible Thin cor. stands 700 ft above cor. of recs. 23-24-26- and 26
	From this cor. the log house of David C Bullock bears N 45° 2' E 12,800 chs. Land mountainous broken and rolling Soil gravelly moderate Timber cedar of small size Dense oak brush Mountainous land 8,000 chs. -
4000	November 3, 1898 at 9 ⁴⁵ m a.m., I. m.t. I set off 37° 25' 30" on the lat. arc 15° 12' "S. on the decl. arc and determine a true meridian with the colas at the cor. of recs. 13-14-23 and 24 thence 0 run 589° 52' E on a random line bet. recs. 13 and 24
7,950	Set tenth 1/4 sec cor Intersect E. bdy. of Tp. 12 elev N of cor. of recs. 13- 18-19 and 24 which is a stone firmly set marked and witnessed as described by the surveyor general Thence 0 run N 89° 41' W on a true line bet. recs. 13 and 24 On mountainous land
2,10	Descending gradually in bottom of Hay Cañon Old wagon road bears S 70° W and N. 70° E
5,00	Leave bottom of Cañon and run on S. slope
29,50	Ditch 3 elev wide drains S. C
34,20	Old fence bears N 25° W and S. 25° E
34,75	Enter bottom of North Fork course S 20° W and N 20° E
36,90	North Fork of Virgin River 17 elev. wide flows S. 20° W

Subdivision of T 39 S 129 W

Chains	about 400 ft below cor.
	Begins ascent on broken slope
38.88	Wagon road from Cedar City to North Fork bears N. and S.
39.70	Set a sandstone 18 x 9 x 7 in. 12 in. in the ground for 1/4 sec. cor. marked 1/4 on N. face; raised a mound of stones 2 ft base. 1 1/2 ft. high N. of cor. - Pits impracticable
48.00	Top of spur S.E. 180 ft. above creek Begin descent
50.64	Stream 2 hrs. wide flows S. 20° E. in bottom of ravine 60 ft deep
	Begin gradual ascent on broken slope
62.10	David C. Bullock's south fence bears N 75° E and S 75° W
78.29	Ditch 4 hrs. wide flows S.
78.73	David C. Bullock's west fence bears N. and S.
79.59	The cor. of secs. 13-14-23 and 24 Thin cor. stands 400 ft. above the creek Land mountainous broken and rolling soil gravelly and sandy 2nd and 3rd rate Timber: a few scattering trees on E side of creek Dense oak brush on W. 1/2 mile Mountainous land 79.59 chs. - November 3. 1898: at this cor. took off 15° 15' 15" S. on the decl. arc and at 11:44 m. a.m. I did not observe the sun on the meridian the resulting lat. is 37° 26' 30" N

	N 0° 1' W. bet secs. 13 and 14 on mountainous land, and dense undergrowth ascending gradually on broken slope
30.86	Fence bears E. and W.; enter Robert Bullock's ranch Top of slope and, spur N. 75° E 150 ft. above cor. Begin descent
40.00	Set a sandstone 30 x 11 x 6 in. 22 in. in the ground for 1/4 sec. cor. marked 1/4 on N. face; raised a mound of stones 2 ft base. 1 1/2 ft high N. of cor. Pits impracticable
44.18	Road from Cedar City to North Fork bears N.W. and S.E.
44.47	Fence bears N.W. and S.E.; enter cultivated field
44.87	Ditch 4 hrs. wide flows S.E.
45.90	Bottom of ravine and wash E., from, canyon, 150 ft below spur.
	Begin ascent

Subdivision of T 39 S R 9 W.

chain	
48.65	Fence bears N.E. and S.W. Leave cultivated field crossed following fence
48.72	S.E. cor. Robert Bullock's two-story loghouse bears S.E. 700 ft. 2.5-9 chrs.
51.37	Begin steep ascent, on rocky slope
66.25	Top of ridge E. from break 275 ft above foot of slope Begin descent
80.00	Set as sandstone 18x8x7 in., 12 in. in the ground for cor. of secs. 11-12-13 and 14 marked with 4 notches on S. and 1 notch on E. edges; from which A pine tree 30 in. diam. bears S 65°-50' W 87 deg. dist. marked T 39 S R 9 W S 14 B.T. No other trees within limit; raised at around of stones 2 ft. base 1/2 ft. high W. of cor. Poli impracticable
	Land mountainous broken and rolling soil gravelly, and black loam 1st and 3rd soils Timber a few scattering pine trees on S. 10 chrs Dense undergrowth - of rank oak brush on 75,000 chrs. Mountainous land and dense undergrowth 80,000 chrs.
40.00	S 89° 47' E on a random line bet. secs. 12 and 13 at limb 74 sec. cor.
79.80	Intersect E. edge of top at cor. of secs. 7-12-13 and 14 which is a stone firmly set. and properly marked and witnessed as described by the surveyor general
	Thence S run
	N 89° 47' W. on a true line bet. secs. 12 and 13
	In mountainous land
	Descending on edge of broken plateau
16.00	Perpendicular sandstone break 70 ft deep bears S and S Foot of break and beginning of steep descent
16.30	
27.57	Enter bottom gulch and fringe of pine trees course S 15° W 000 ft. below cor.
28.83	North Fork of Virgin River 16 chrs. wide course S 16° W.
34.07	Perpendicular wall of black lava bears S. 16° W. and N 20° E. 15 ft. high
	Leaves bottom of gulch and fringe of timber and ascend abruptly to bench

Subdivision of T 39 S R 9 W.

chain	Thence on gradual ascent
34,60	Enter plowed land bears about N and S.
37,40	Road bears N. and S.; from Cedar City to Long Valley
37,70	Leave plowed land course N and S; about 1 acre plowed
39,90	Set a sandstone 18 x 10 x 7 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on st. face, raised a mound of stone 2 ft. base 1/2 ft. high N. of cor. Pile impracticable
43,50	Ascent becomes steep and rocky course N 20° E. and S 20° W.; and scattering cedars
51,25	Tp. of spur 150 ft. high runs south from break Begin descent
60,00	Enter bottom of gulch course N. and S.
60,66	Fence bears N and S; enter Robert Bullock's pasture; leaves cedar
65,33	Road to Straight Canon bears N. and S.
66,31	Ditch 4 ltrs wide flows S 15° E
66,64	Stream 6 ltrs wide course S 10° E in bottom of gulch Begin ascent
68,66	Ditch 3 ltrs wide course S.
70,00	Begin steep ascent, course N 30° W and S 30° E. leaving bottom of gulch
79,80	The cor. of secs. 11-12-13 and 14 This cor. stands 200 ft. above gulch. Land mountainous very broken Soil gravelly and rocky 2nd and 3rd mile Timber, pine and cedar, scattering and in patches. Mountainous land 79.80 ac.

	N 0° 1' W. bet. secs. 11 and 12
	On mountainous land
	Descending on N. E. slope, in timber and oakbrush
21,60	Enter bottom of Straight Canon course N 20° W and S 20° E 300 ft. below cor Leaves timber
34,60	Stream 5 ltrs. wide course S 20° E Begin gradual ascent
35,00	Enter cultivated land of Tom Tate and Levy Walker parallel with stream.

Section line of T. 39 S. R. 9 W.

chain

- 38.26 Lava cultivated land course E. and W.
- 40.55 Set a sandstone 18 x 10 x 6 in. 12 in. in the ground
for the sec. cor. marked 14600 ft. face; found which
a pine tree 31 in. diam. bears N. 48° W. 105 deg.
dist. marked 145.11 R.T.
- No other trees within limit: raised a mound
of stones 2 ft base 1½ ft high W. of cor.
- The cabin of Tom Tate and Levy Walker bears N.
29° 40' W 11.05 chs.
- 41.00 Enter timber covered E and W
- 45.65 Stream from N. burns S. 20° W. 5 ft. dia. wide
- 46.15 Lava stream burns S. 30° W.
- 52.34 Ditch 3 ft. wide flow S. 25° E
- 52.75 Road is straight. Course curve S. 30° E. and N. 30° W.
- 53.50 Begin steep broken ascent: leaving bottom of course
burns N. 25° W and S. 25° E
- 78.00 Foot of perpendicular break of gray sandstone 80 ft
high course N. 5° W and S. 5° E therein offset
as follows
- West 30 chs.
N. 0° 1' W 1.40 chs.
- East 30 chs. to point on line at .
- 80.40 Set a candleline 36 x 10 x 8 in. in a mound of stones
3 ft. base 2 ft. high for. cor. of secs. 1-2-11 and 12
marked with 5 notches on S. and 1 notch on E.
edges: from which
A point on the wall of the cliff 34 ft. high
burns N. 10° W. 1 ch. dist. marked T 39 S R 9 W.
52 R.O.
- No other bearing of tree within limit
- This cor. stands in a cleft from the west in
the perpendicular wall of the break: about 3 ft
wide at the mouth 12 ft. deep and reaches from
top to bottom of cliff: and about 300 ft above
bottom of gulch. -
- and mountain very broken
- Soil gravelly and rocky on slopes - sandy loam in
bottom of gulch 1st and 3rd rate
- Gravel fine of good size but very scattering
and oak brush on slopes

Subdivision of T. 39 S. R. 9 W.

Chains	Mountainous land 8000 chs. November 3, 1898
4,000	November 4, 1898 at 8:43 a.m., I set off 37° 27' W. on the lat. arc 15° 30' S. from the decl. arc and determine a true meridian with the solar at the cor. of secs. 1-2-11 and 12 thence I run S 89° 47' E on a random line bet. secs. 1 and 12 set. limits 1/4 sec. cor.
79.76	Intersect E. bdy. of Tp. 10 line N. of cor. of secs. 1-6-7 and 12 which is a stone firmly set marked and witnessed as described by the surveyor general. Thence I run S 89° 43' W. on a true line bet. secs. 1 and 12 On mountainous land Ascending on broken rocky slope to top of ridge bears N. and S. 300 ft above cor. Begin steep broken descent Bottom of narrow canon 280 ft deep course S. 20° E. and N. 20° W.
30.70	Stream 2 lbs. wide course S 20° E Begin ascent
37.00	Top of canon: thence on gradual broken slope to
39.88	Set a sandstone 24 x 10 x 6 ins. 18 ins. on the ground for 1/4 sec. cor. marked 1/4 on N. face; raised a mound of stones 2 ft. base 1 1/2 ft. high N. of cor. Pillar impracticable
58.01	Top of ridge bears N. and S. 500 ft above bottom of canon Begin descent on broken slope
79.46	Descends abruptly in cleft of break 80 ft. to the cor. of secs. 1-2-11 and 12
79.76	This cor. stands 300 ft. below tip of ridge Land mountainous very rugged soil gravelly and rocky & bare Timber a few pine trees scattering Dense oak brush Mountainous land 79.76 chs. -
4,000	N 0° 1' W on a random line bet. secs. 1 and 2 set. limits 1/4 sec. cor.
77.54	Intersect N. bdy. of Tp. 26 line 1.887716 of cor. of secs.

Subdivision of T. 39 S. 17. G. W.

chain	1-2-35 and 36 which is a short firmly set marked and witnessed as described by the surveyor general Tinelle Orm
	50° 12' E on a tree line bet. secs 1 and 2
	On mountainous land
	Descending gradually on E. side of Straight Canon
	In timber and dense oak brush
22.00	Began ascent on N.W. slope, canon turns S 20° W.
32.00	Top of slope 268 ft. above canon
	Thence on gradual ascent on broken N. slope
37.54	Set a sandstone 18 x 10 x 6 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face: raised a mound of stones 2 ft. base 1 1/2 ft high W. of cor. Pili impracticable
50.10	Bottom of ravine 100 ft deep crossed S 55° 50' W
77.45	Descending abruptly 80 ft to
77.54	The cor. of secs. 1-2-11 and 12
	Land mountainous very broken soil gravelly and rocky 3rd and 4th rate Timber pine, a few scattering trees Dense oak brush
	Mountainous land 77.54 chd —
	November 4, 1898 at this cor. I set off 15° 33' S on the decl. arc and at 11° 44' W a.m., 7 m. t. observed the sun on the meridian: the resulting lat. is 37° 27' N

	From cor. of secs. 2-3-34 and 35 on S. bdy. of Tp. Orn
	N. 0° 1' W. bet. secs. 34 and 35 —
	On mountainous land
	Descending on steep broken slope, in timber and dense brush
7.00	Leave timber, cross S. E. and S. W.
26.70	Descent becomes gradual at bottom of slope crossed N. 25° E
40.00	Set a sandstone 18 x 9 x 6 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face: raised a mound of stones 2 ft. base 1 1/2 ft high W. of cor.— Pili impracticable..
47.00	Head of rocky ravine crossed S

Subdivision of T. 39 S. 19° 9' W.

150

chains	Begin descent on N. slope of ravine Entered timber course E. and W.
75,90	Began ascent ravine turns N.W. Top of ravine and floor at 60° N.W.
79,50	
80,00	Set on sandstone 18x10x7 in. 12 in. in the ground for cor. of sect. 26-27-34 and 35° marked with 1 notch on S. and 2 notches on E. edges; found which A cedar tree 8 in. diam. bears S 79° 25' E. 109 deg. dist. marked T. 39 S. R. 9 W. S 35 B.T. A pine tree 10 in. diam. bears S. 84° 03' 21" W. 45 deg. dist. marked T. 39 S. R. 9 W. S. 34 B.T. No other trees within limit: raised a mound of stones 2 ft. base 1½ ft. high N. of cor. - Pits impracticable
	This cor. stands 725 ft. below the cor. of secs. 2-3- 34 and 35°
	Land mountainous very broken Soil gravelly and rocky 45% ratio Timber cedar and pine of small size and scattering Mountainous land 8000 ft. -
	November 4, 1898

November 5, 1898 Same

East on a random line bet. secs. 26 and 35°

40,00	Set temp. 14 sec. cor.
80,00	Crosscut N. and S. line at cor. of secs. 25-26-35° and 36
	Thence S and
	West on a line line bet. secs. 26 and 35°
	On mountainous land
29,30	Descending gradually on broken slope, in dense oak brush Beginning of steep descent bears N. and S.
38,60	Entered timber and; lost sandy slide and boulders.
40,00	Perpendicular sandstone break 25 ft. deep bears N. and S. Set on sandstone 18x11x6 in. 12 in. in the ground for 14 sec. cor. marked 14 sec. N. face: found which A pinion tree 10 in. diam. bears N 34° 35' W. 9 deg. dist. marked 14 S. 26 B.T. No other trees within limit: raised a mound of stones 2 ft. base 1½ ft. high N. of cor. Pits impracticable.

Subdivision of T 39 S 129 W.

chains	
58.70	Bottom of Ravine 800 ft below cor. of sec.
	coursed N. 30° W and beginning of steep ascent to
64.80	Top of spur N 30° W 100 ft. above ravine
	Thened on broken slope and gradual descent
- 80.00	The cor. of secs. 26-27-34 and 35-
	Land mountainous very rugged
	Soil gravelly rocky and sandy 4th rate-
	Timber: scrubby cedar and pine scattering
	Mountainous land 8000 chs.-
	N 0° 1' W. bet. secs. 26 and 27
	On mountainous land
	Descending on broken slope, in scattering timber
	and dense brush
19.00	Wash 45 ft deep course N. 15° E
23.00	Cedar timber course N. E. and S. W.
29.60	North Fork of Virgin River 16 chs wide course S.W. in
	bottom of open gulch 300 ft below cor.
	Begins gradual ascent
31.96	Road from Cedar City to N. Fork parallel with creek
36.50	Enter dry wash from N. course S. 10° W. and begin steep
	broken ascent
39.40	Enter timber, course N. E. and S. W.
40.00	Set a sandstone 18 x 10 x 7 ins. 12 ins. in the ground
	for 1/4 sec cor. marked 1/4 on st. face: from which
	A cedar tree 12 ins diam. bears N 60° 10' E. 38 chs. dist.
	marked 1/4 S. 26 B.T.
	A cedar tree 10 ins. diam. bears S 71° 29' W. 48 chs.
	dist. marked 1/4 S. 27 B.T.
58.00	Wash turns S. W.
80.00	Set a sandstone 18 x 8 x 7 ins. 12 ins. in the ground
	for cor. of secs. 22-23-26 and 27 marked with 2
	notches on S. and E. edges. from which
	A cedar tree 12 ins. diam. bears N 70° 30' W. 22 chs. dist.
	marked T 39 S 129 W S. 22 B.T.
	A cedar tree 5 ins. diam. bears S 85° 24' W. 42 chs.
	dist. marked T 39 S. R 9 W S. 27 B.T.
	A cedar tree 9 ins. diam. bears S 57° 35' E. 28 chs.
	dist. marked T 39 S R 9 W S 23 B.T.
	A cedar tree 7 ins. diam. bears S 60° 7' E. 45 chs.

Subdivision of T 39 S 129 W.

chain	dist. marked T 39 S 129 W 5.26 B.T. Raised at mound of stones 2 ft. base 15 ft. high W. of cor. This cor. stands 600 ft above creek Land mountainous broken and rolling Soil gravelly and rocky 3-4 and 4-5 in. Timber scrubby cedar mainly scattering Mountainous land 8,000 ft. November 5, 1898 at this cor. I set off 15° 5' S on the decl. arc. and at 114° 44' a.m. I int. observed the sun on the meridian the resulting lat. is $37^{\circ} 25' N$
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4,000	East on a random line bet. sec. 23 and 26 Set. limb 1/4 sec. cor.
50,10	Intersects N. and S. line at cor. of sec. 23-24-25- and 26
	Then I run
	West on a true line bet. sec. 23 and 26
	On mountainous land
	Ascending in dense brush to
0,55	Top of sharp rocky spur N 25° W and beginning of descent
2,60	Enter creek bottom and dense willow brush Course N 30° E and S 30° W
4,62	North Fork of Virgin River 16 ft wide swift current course S. 35° W.
	Begin gradual ascent
10,35	Road from Cedar City to N. Fork about parallel with creek
11,00	Begin steep broken ascent course N. 25° E and S. 25° W. and scattering timber bears N. E. and S. W.
4,005	Set a sandstone 18 x 11 x 6 in. 12 in. in the ground for 1/4 sec. cor. marked 1/4 on N. face from which A cedar 8 in. diam. bears S 17° 33' W. 77 lbs. dist. marked 1/4 S 26 B.T.
	A fine tree 6 in. diam. bears N. 52° 27' E 60 lbs dist. marked 1/4 S. 23 B.T.
54,00	Top of spur 5.500 ft. above creek.
	Begin descent on rocky broken slope
56,20	Perpendicular sandstone break 50 ft. deep bears

Subdivision of T 39 S R 9 W

chain	N 60°W and S 60°E
76,90	Bottom of ravine 400 ft deep course S. 20° E Begin steep ascent to
80,10	The cor. of sec. 22-23-26 and 27 This cor stands on S.E. slope 110 ft above bottom of ravine Land Mountainous very rugged Soil gravelly loam in bottom of gulch; on slopes rocky sandy and gravelly 2 nd and 4 th rates Timber, scrubby cedar scattering Dense oak brush, willow and thorn Mountainous land 50,10 Chs. -
	November 6, 1898 at 2 ⁴ 53 ^m p.m., T.M.T. Set off 37° 26' N on the lat. arc 15° 53' S. on the decl. arc and determine a true meridian with the solar at the cor. of sec. 22-23-26 and 27. Then I run N 0° 1' W. bet. sec. 22 and 23 On mountainous land Ascending broken rock of slope In timber
5,00	Begin steep ascent in loose sandy soil and large boulders
9,10	Foot of vertical sandstone break 90 ft. high bears about E. and W.
9,20	Top of break and beginning of ascent on slide boulders and ledges.
4,000	Set a sandstone 18 x 9 x 6 in. 12 in. in the ground for 1/4 sec. cor. marked 44 rods W. face raised at round of stones 2 ft. base 1 1/2 ft. high W. of cor. Pit impractical
4,500	Ascent becomes less steep and broken
5,624	Foot of slide bears N 65° E and S 65° W. and beginning of ascent in sand and boulders
6,895	Foot of perpendicular sandstone break 230 ft. high course N 65° E and S 65° W
6,915	Top of break and beginning of ascent on plateau
73,00	Top of plateau: there on rolling surface and E. slope to
8,000	Set a sandstone 24 x 12 x 5 in. 18 in. in the ground for cor. of sec. 14-15-22 and 23 marked

Subdivision of T. 39 S. R. 9 W.

chain with 3 notches on S and 2 notches on E. edges.
 raised a mound of stones 2 ft. base $1\frac{1}{2}$ ft. high
 W. of cor. Pits impracticable
 Thin cor. stands 2000 ft. above the cor. of sec. 22-23.
 26 and 27
 Land mountainous very rugged
 Soil rocky and gravelly and loose sand on slopes
 Timber scrubby cedar very scattering, below last
 break.
 Mountainous land 80,00 chs. -

November 6, 1898

November 7, 1898 at 7⁴⁵ a.m., I set off 37°25'
 30" N. of the lat. arc 16°22' " S. on the decl. arc and
 determine a true meridian with the solar at the
 cor. of sec. 14-15-22 and 23 thence I run
 East on a random line bet. sec. 14 and 23
 2st length 1/4 sec. cor.
 Intersect N. and S. line at cor. of sec. 13-14-23 and 24
 Thence I run
 West on a true line bet. sec. 14 and 23
 On mountainous land
 Ascending on bottom slope, in dense oak brush
 Set a sandstone 18 x 9 x 6 in. 12 in. in the ground
 for 1/4 sec. cor. marked 1/4 on N. face, I raised a mound
 of stones 2 ft. base $1\frac{1}{2}$ ft. high S. of cor. Pits impracticable
 Foot slope from break bears N. and S.
 Begin steep ascent in sand and boulders
 Foot of perpendicular sandstone break 80 ft. high
 course N. and S.
 Top of break and beginning of steep ascent to
 Top of plateau and ridge bears N. and S. 800 ft. above
 sec cor.
 Begin descent
 Bottom of rocky ravine course S 150 ft. deep.
 Ascending to
 The cor. of sec. 14-15-22 and 23
 Land mountainous very rugged
 Soil gravelly sandy and rocky 2nd and 4th rate
 No timber. - Dense oak brush the whole distance
 Mountainous land 80,06 chs. -

Subdivision of T. 39 S. R. 9 W.

chain	N 00° 1' W bet. sec. 14 and 15 On mountainous land Ascending gradually on rolling plateau In dense undergrowth-
4000	set a sandstone 18 x 10 x 6 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on ad. face; raised a mound of stones 2 ft. base. 1 1/2 ft. high N. of cor. Pits impracticable
6060	Scars of gulch course S. 10° E.
64.65	Top of slope and ridge running S. 70° E. and N. 70° W 3.50 ft above cor. Begin descent
- 8,000	set a sand stone 18 x 8 x 8 ins. 12 ins. in the ground for cor. of secs. 10-11-14 and 15 marked with 4 notches on S. and 2 notches on E. edges; raised a mound of stones 2 ft. base 1 1/2 ft. high N. of cor. Pits impracticable This cor. stands 260 ft below tip of ridge Land mountainous broken and rolling Soil gravelly 3rd rate Timber a few, scattering, large pine trees Dense undergrowth - of rank oak brush Mountainous land and dense undergrowth 8 rods. November 7, 1898: at this cor. I set off 16° 27' S. on the decl. arc and at 11° 44' m a sec., I cut observe the sun on the meridian: the resulting latitude is 37° 26' 30" N
4000	East on a random line bet. secs 11 and 14 set lmp. 1/4 sec cor.
8,000	Intersect N. and S. line 5 lbs. N. of cor. of secs. 11-12-13 and 14 Thence I run
15,00	N 89° 58' W on a true line bet. secs. 11 and 14 On mountainous land Ascending, in timber and undergrowth - Perpendicular sandstone break soft high bears N 25° W and S 25° E
17,50	Top of break: thence on steep, sandy and rocky ascent to
21,00	Top of spur S.E. 400 ft. above cor. and beginning

Subdivision of T. 39 S. R. 9 M.

chain 30,12	of steep broken descent on side of canon Top of perpendicular sandstone break 80 ft. deep bears N.W. and S.E.
30,20	Foot of break and beginning of descent in sandy slide and boulders
33,50	Leave slide and descend on steep broken slope
44,00	Set a sandstone 18 x 9 x 7 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 sec. S. face; raised a mound of stones 2 ft. base 1 1/2 ft. high S. of cor. Pit inferable
45,57	Road from Cedar City, to North Fork or Lower Head, as the country below the breaks are called locally. The Bullock ranches in sec. 13 are known as the Lower Head ranches.
46,05	Dry wash and bottom Lower Head Canon course 5. 60° E. 600 ft below tip of plateau This is the only opening in the breaks for 10 miles West and north through which a wagon road could be made without much blasting of rock and enormous expense).
63,15	Begin ascent on broken, rocky slope Foot of perpendicular sandstone break 60 ft. high course N. 60° W. and S. 60° E.
63,26	Top of break and beginning of broken ascent to the cor. of secs. 10-11-14 and 15-
87,70	This cor. is 5-80 ft above the 1/4 sec. cor. Land mountainous very rugged Soil rocky sandy and gravelly 4 th ratio Timber, a few large fine trees scattered Dense oak brush undergrowth Mountainous land 80,00 elev. -
610	N 0° 1' W. bet. secs. 10 and 11 On mountainous land Descending in timber and undergrowth Begin steep descent on break of canon on slide and rocky ledges
10,00	Enter bottom of Lower Head canon 260 ft. below cor. course about E and w.
14,80	Head of spring draining S. 60° E 2 mi. wide
15,10	Wagon road from Cedar City to N. Fork bears

Subdivision of T 39 S 189 W

chain	N 60° W. and S. 60° E.
	Begin abrupt ascent on sandstone break course N 60° W and S 60° E
15,80	Top of break 30 ft. high and beginning of steep ascent to
19,60	Top of canon and beginning of gradual ascent on plateau
40,00	Set at sandstone 28x9x8 ins 20 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face; raised as mound of stones 2 ft. base 1 1/2 ft. high W. of cor. Pili impracticable
43,40	Top of ridge 4.90 ft. above canon course & 60° W. and S. 60° E.
	Begin descent
- 80,00	Set at sandstone 18x10x7 ins. 12 ins. in the ground for. cor. of secs. 2-3-10 and 11 marked with 5 notches on S. and 2 notches on E. edges; raised as mound of stones 2 ft. base 1 1/2 ft. high W. of cor. - Pili impracticable
	This cor. stands 400 ft below lip of ridge
	Land mountainous very rugged
	Soil gravelly and rocky 4 ch. rate
	Timbered, a few large pine trees scattering
	Dense oak brush undergrowth
	Mountainous land 8,000 chs.
	November 7, 1898

	November 8, 1898 I run
	S 89° 5' 8" E on a random line bet. sec. 2 and 11
40,00	Set length 1/4 sec. cor.
80,10	Intersect N. and S. line at cor. of secs. 1-2-11 and 12 Hence I run
	S 89° 5' 8" W. on a tree line bet. sec. 2 and 11
	On mountainous land
	Descending on steep rocky, sandy slope!
6,60	Foot of slope bears about N. and S. 150 ft below cor.
6,69	Hagon wall to Straight Canon runs parallel with ridge
7,70	stream 8 ins. wide course S. in bottom of straight canon
	Begin ascent in scattering timber

Subdivision of T. 39 S. R. 9 W.

chains	
20.15	Foot of perpendicular sandstone break 80 ft high bears N. 10° W. and S. 100° E
20.25	Top of break and beginning of ascent W.
35.25	Top of ridge S 25° E and N. 26° W 200 ft above creek Begin descent
40.05	Set at sandstone 18 x 10 x 7 in., 12 in. in the ground for 1/4 sec. cor. marked 1/4 on N. face: raised a mound of stones 2 ft. base 1 1/2 ft high N. of cor. Pits impracticable
48.50	Top of perpendicular sandstone break 80 ft. deep bears N. 10° W. and S. 26° E
48.55	Bottom of break and canon 350 ft. below top of ridge
50.00	Stream 3 ft. wide courses S 10° E.
51.50	Foot of spur bears N. and S. Begin abrupt ascent
54.05	Top of spur 80 ft. high runs S.E. Begin abrupt descent 15°
57.50	Bottom of canon 80 ft. below spur courses N 60° W and S 60° E
60.50	Stream 2 ft. wide courses S 60° E.
66.00	Leave bottom of canon courses S 60° E and N 60° W and begin abrupt ascent
80.10	The cor. of accs. 2-3-10 and 11 This cor. stands 300 ft above bottom of canon Land mountainous very rugged Soil gravelly and rocky & dry Timbered, a few large pine trees, scattering Dense oak brush undergrowth - Mountainous land 80,10 elev. -
	N 0° 1' W. on a random line bet. accs. 2 and 3
40.00	Set line 1/4 sec. cor.
79.00	Intersect tr. body of T.p. 2.75 dm. S 89° 05' W of cor. of accs. 2-3-34 and 35 which is a stone firmly set marked and witnessed as described by the Surveyor general - And on which I destroy marks pertaining to accs 2 and 3 Set at sandstone 18 x 9 x 5 in., 12 in. in the ground for closing cor. of accs. 2 and 3 marked C.C. on S. with 2 grooves on E and 4 grooves on N. faces: raised a mound of stones 2 ft. base

Subdivision of T. 39 S. R. 9 W.

	Chain	$1\frac{1}{2}$ ft. high S. of cor. Pits impracticable Thence I run $50^{\circ} 1'$ E on a true line bet. secs. 2 and 3 On mountainous land Descending gradually on broken slope. in timber and brush
	700	Bottom of gulch 100 ft deep course 5.30° E. Begin ascent on N. E. slope
	20,90	Top of spur 5.35° E 200 ft. high and beginning of descent
	39,60	Set a sandstone $24 \times 11 \times 5$ in., 18 in. in the ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on N. face raised a mound of stones 2 ft. base $1\frac{1}{2}$ ft. high N. of cor. - Pits impracticable
	44,10	Bottom of canon 400 ft. deep course 560° E. Begin ascent on rocky slope
	62,00	Top of ridge bears 565° E and 165° N. 400 ft. above canon Begin descent
	73,05	Dry wash in bottom of narrow canon 320 ft. deep course 5.66° E Ascending in
-	79,60	The cor of secs. 2-3-10 and 11 Land mountainous very rugged soil gravelly and rocky 4th rate Timber, a few large pine trees scattering Dense oak brush undergrowth Mountainous land 7960 chs. - November 8: 1898: The weather being cloudy I could not observe the sun while on the meridian
		November 8, 1898 at 2 ^h 30 ^m p.m., 7960 chs set off 37° $23'$ from the lat. arc $16^{\circ} 46'$ S on the decl. arc and determined a true meridian with the solar at the cor of secs. 3-4-33 and 34 on S. bdy. of T.S. Thence I run $N 0^{\circ} 2'$ W. bet. secs. 33 and 34 On mountainous land Descending on broken slope In scattering timber and dense undergrowth Set a sandstone $18 \times 9 \times 6$ in., 12 in. in the ground
	4000	

Subdivision of T. 39 S. R. 9 W.

250

	for 1/4 mile cor. marked 1/4 cor. N. face; raised a mound of stones 2 ft. base 1/2 ft. high N. of cor. A cedar tree 7 in. diam. bears 4-70° W. 37 elev. dist. marked 1/4 S. 33. D.T.
42,7,6	Bottome of ravine 70 ft. deep drains N. 80° W. 650 ft. below rec. cor.
	Begin ascent
44,10	Top of spur at 70 ft. high and beginning of descent Leave timber, course N. W. and S. E.
51,0,0	Enter cultivated land of Levy Walker, bears S. W. and S. E. and bottom of gulch
54,0,0	Log cabin of Levy Walker bears 4-05°-55° E 15,40 elev.
54,3,5	Leave plowed field course N. W. and S. E.
54,7,5	North Fork of Virgin River 16 elev. with current course S. W.
	Begin ascent on broken surface
56,5,5	With 5-ft. wide floor S. W. 20 ft. above creek
57,0,0	Enter timber, bears N. E. and S. W.
76,5,0	Leave timber bears E. and S. E.
80,5,0	Set at sandstone 18 x 10 x 6 in. 12 in. in the ground for cor. of secs. 27-28-33 and 34 covered with 1 match on S. and 3 matches on E. edges; raised a mound of stones 2 ft. base 1/2 ft. high N. of cor. -
15 285	Piki impracticable.
	This cor. stands 480 ft. above the creek
	Land mountainous very broken, and gully bottom soil gravelly and rocky on slopes; sandy loam in gullies Timber pine and cedar of small size and scattering Dense thorn undergrowth -
	Mountainous land 77,13 elev. -

East on a random line bet. secs. 27 and 34

Set. limb 1/4 rec. cor.

S. 100 ft. from N. and S. line at cor. of secs. 26-27-34
and 35

Then I run

West on a true line bet. secs 27 and 34

On mountainous land

In timber and dense undergrowth -

164
Subdivision of T 39 S 189 1/4 N.

chain	
0.50	Begin descent
4.50	Bottom of ravine 100 ft. deep curves N.W. Leaves timber, bears N.E. and S.W.
5.62	Set a sandstone 18x8x7 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face from which a cedar tree 10 ins. diam. bears West 90 deg. dist. marked 1/4 S. 27-34 B.T.
	In other trees within limit: raised a mound of stones 2 ft. base 1 1/2 ft. high N. of cor. - Pits impracticable
41.2	Ditch 4 hrs. wide flows S 10° E, and beginning of gradual descent
46.4	Road from Cedar City to N. Forks bears N. and S.
52.0	North Fork of Virgin River 16 hrs. wide flows S. W. in bottom of open gully, in narrow channel 8 ft. below surface and 700 ft. below sec. cor.
	Begin ascent
55.00	Entire timber bears N.E. and S.W.
70.0	Leaves timber bears N. and S.
80.04	The cor. of sec. 27-28-30 and 34
	This cor. stands 430 ft above creek
	Land mountainous, broken and rolling
	Soil gravelly and rocky on slopes; gravelly and sandy loam in bottom of gully
	Timber pine and cedar of small size and very scattering
	Dense undergrowth of oak and thorn brush
	Mountainous land 8004 hrs. -
	November 8, 1898

chain	November 9, 1898 I am 40' 2" W. beh. secs. 27 and 28 On mountainous land Scanting on broken surface Entire scattering timber
5.5	Set a sandstone 18x9x7 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face; from which a cedar tree 11 ins. diam. bears N 15° 35' W. 24 hrs. dist. marked 1/4 S. 25 B.T.
	In other trees within limit: raised a mound of stones 2 ft. base 1 1/2 ft. high N. of cor. - Pits impracticable

Subdivision of T. 39 S. R. 9 W.

chains 58.00	Top of ridge bears E. and W. 460 ft above sec' cor. Land scattering timber and enter dense oak brush course E and W.
58.04	Begin gradual descent on rolling surface Bottom of ravine draining S. 80° E. and beginning of gradual ascent 100 ft below top of ridge
80.00	Set a sandstone 18 x 8 x 6 in., 12 in. in the ground for cor. of sec. 21-22-27 and 28 marked with 2 notches on S. and 3 notches on E. edges; raised as mound of stones 2 ft. base 1½ ft. high W. of cor. Pits impracticable Land mountainous broken and rolling Soil gravelly and rocky 4 th rate Timber scrubby cedar and subpine scattering Mountainous land 80,000 chs. -
40.00	November 9, 1898: at 94 35" a sec, 1 out & set off 37° 24' 30" on the lot arc 16° 50' S. on the decl. arc and determine a true meridian with the solar at the cor. of sec. 21-22-27 and 28, three trees Each on a random line bet. sec. 22 and 27 Set in 1/4 sec. cor.
80.12	Intersect N. and S. line 1/4 chs. S. of cor. of sec. 22-23-26 and 27 Picnick S. line At 89° 5' 4" S. on a true line bet. sec. 22 and 27 On mountainous land Ascending in timber

3.20	Top of spur S. from break Begin broken descent
16,50	Bottom of ravine 300 ft. deep course S 20° E Ascending to . . .
30,00	Top of spur S. 15° E 330 ft. above ravine Begin descent
36,96	Bottom of ravine 250 ft. deep course S Ascending
40,06	Set a sandstone 18 x 12 x 6 in., 12 in. in the ground for 1/4 sec. cor. marked 1/4 on N. face from which A juniper tree 12 in. diam. bears S 37° 5' 8" W. 70 chs dist. marked 1/4 S. 27 B.T.

Subdivision of T 39 S R 9 W

	chain	No other trees within limit: raised a mound of stones 2 ft base 1½ ft. high N. of cor. Pit impracticable
	43,40	Top of ravine and beginning of gradual ascent
	67,00	Bottom of wash 40 ft. deep course $820^{\circ} E$
-	80,12	Leave timber: enter heavy oak brush course E and S The cor. of secs. 21-22-27 and 28 This cor stands 500 ft above cor. of secs. 22-23-26 and 27 Land mountainous very broken Soil gravelly and rock of 4th rate Timber, scrubby cedar scattering Mountainous land 80,12 ch. - November 9, 1898 at this cor I set off 1701' S. on the decl. side and at 11444 m a m, 7 m I observed the sun on the meridian the resulting latitude is $37^{\circ} 24' 30'' N$
		$N 0^{\circ} 2' W.$ bet. secs. 21 and 22 On mountainous land Ascending on broken slope in dense oak brush Wash 30 ft deep drains S.E.
16,90		Beginning of steep ascent in scattering timber Set a sandstone 18 x 10 x 6 ins 12 ins in the ground for 14 sec. cor. marked 144 on W. face from which a cedar tree 10 ins. diam bears $S 30^{\circ} 20' W.$ 61.00 ft. dist. marked 1445 21 B.T.
		No other trees within limit: raised a mound of stones 2 ft. base 1½ ft. high N. of cor. - Pit impracticable. -
	45,00	Foot of perpendicular sandstone break 90 ft. high bears E and N.
	45,12	Top of break and beginning of steep ascent on rocky broken slope
	69,00	Foot of slide from upper break bears E and W
	74,10	Bottom of upper break 300 ft high, perpendicular sandstone wall, course E and W.
	74,35	Top of break and beginning of steep ascent in loose soil: leaving timber
	76,20	Top of slope: enter broken plateau course E and W Then on gradual ascent.

Subdivision of T. 39 S. 12 W.

Chain 8,000	Set as sandstone 18 x 9 x 6 in 12 in in the ground for cor. of secs. 15 - 16 - 21 and 22 marked 395 on N.E. and S.W. on S.E. faces with O written on S. and E. edges. -- Raised a mound of stones 2 ft base 1½ ft high N. of cor. Pitt impracticable This cor. stands about 2000 ft. above the cor. of secs. 21 - 22 - 27 and 28 Land mountainous very rugged Soil rocky sandy and gravelly & bare Timber, scrubby cedar scattering Mountainous land 8,000 chs. --
4800	589° 54' E on a random line bet. secs. 15 and 22 set limb ¼ sec cor.
8014	Endless it and S line 15 E. S. of cor. of secs. 14 - 15 - 22 and 23 Dense trees Wash on a low line bet. secs. 15 and 22 On mountainous land
20,00	Ascending on even slope, in dense oak brush Top of ridge bear E. and S. 28 off above cor. Begin descent on even slope
21,90	Top of cor. and beginning of steep descent on rocky slope course N. and S. in timber
34,70	Dry wash and bottom of gulch course S. 200 ft. deep Begin rocky ascent
39,76	Perpendicular break of sandstone soft high bear N and S
39,80	Top of break and beginning of gradual ascent
40,07	Set as sandstone 26 x 8 x 7 in., 19 in., in the ground for ¼ sec. cor. marked marked ¼ on N. face from which A pine tree 11 in. diam. bear 5.2° 35' E 22 chs. dist. marked ¼ S. 22 B.T.
	No other trees within limit -- Raised a mound of stones 2 ft base 1½ ft high N. of cor. -- Pitt impracticable
	Leave timber course parallel with break
55,30	Top of ridge bear 1.1.5° N. and 5.15° E 15 ft. high begin descent

Subdivision of T 39 S 1 P 9 W.

Chain

65,90 Bottom of ravine 150 ft deep corruct S. 20° E

Begin ascent to

80,14 The cor. of secs. 15-16-21 and 22

Land mountainous very broken

soil gravelly and rocky 3rd rate

Tribe, a grove of pine in cañon

Mountainous land 80.14 chs. -

November 9, 1898

14,00

Head of ravine drain S. 30° E and beginning of ascent
on SW slope

40,00

Set at sandstone 18x4x7 ins 12 ins in the ground for
1/4 sec. cor. marked 1/4 on N. face: raised as mound
of stones 2 ft. base 1 1/2 ft high W. of cor. -

Pili impracticable

62,00

Head of ravine drain S. 30° W.

80,00

Set at sandstone 18x4x7 ins. 12 ins. in the ground for
cor. of secs. 9-10-15 and 16 marked with 4 notches
on S and 3 notches on E edges: raised as mound of
stones 2 ft. base 1 1/2 ft. high W. of cor.

Pili impracticable

This cor. stands 450 ft. above the cor. of secs. 15-16-
21 and 22

Land mountainous broken and rolling
soil gravelly 3rd rate

Tribes, a few large pine trees scattering

Dense oak brush underground -

Mountainous land 80.00 chs. -

40,00

East on a random line bet. sec. 10 and 15

Set temp. 1/4 sec. cor.

80,00

Intersect N. and S. line at cor. of sec. 10-11-14 and

Subdivision of T. 39 S. R. 9 W.

chains	15'
	Thence I run
	West on a true line bet. sec. 10 and 16 -
	On mountainous land
	ascending gradually on broken plateau in dense oak brush and scattering timber
4,000	Set a sandstone 18x10x6 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face; raised a mound of stones 2 ft. base 1 1/2 ft. high N. of cor. Pits imperceptible. —
53,00	Top of ridge bears N. 30° W. and S. 30° E 400 ft. above the sec cor..
	Begin descent
60,50	Head of gulch draining S. 120 ft. below top of ridge
	Begin ascent
77,50	Top of ridge bears S. and N. E. 200 ft. above gulch
	Descending to
80,00	The cor. of sec. 9-10-15 and 16
	Land mountainous broken and rolling
	Soil gravelly and sandy 3rd rate
	Timber; a few large pine trees scattering
	Mountainous land 8,000 chs. —
	November 10: 1898: At this cor. I set off 17° 18' 11" S. on the decl. arc and at 114 44" a. m., 2 mi. + observe the sun on the meridian; the resulting latitude is 37° 26' 30" N

	N 0° 2' W. bet. sec. 9 and 10
	On mountainous land
	ascending on broken slopes in dense oak brush
5,00	Top of spur W. and beginning of descent
30,06	Bottom of gulch drains W. 300 ft. below spur
	Begin ascent on W. slope
4,000	Set a sandstone 18x11x7 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face; raised a mound of stones 2 ft. base 1 1/2 ft. high W. of cor. Pits imperceptible
46,60	Top of spur W. 200 ft. high and beginning of descent
60,04	Bottom of gulch drains W. and
	Road from Cedar City to North Fort bears E and W.
	Begin ascent

Subdivision of T. 39 S. R. 9 W.

	chains	On broken slope.
	80,75	Set a sandstone 18x10x6 in., 12 in. in the ground for cor. of secs. 3-4-9 and 10 marked with 5 notches on E. and 3 notches on S. edges; raised a mound of stones 2 ft. base 15 ft. high N. of cor. - Pits impracticable. Thin cor. stands on S.W. slopes 250 ft above gulch. Land mountainous high broken plateau soil gravelly 3rd rate No timber; dense oak brush undergrowth. Mountainous land 80,00 chain. -
	40,00	East on a random line bet. secs. 3 and 10 Set comp. 1/4 sec. cor.
	79,94	Intersect N. and S. line & C.R. S. of cor. of secs. 2-3-10 and H. Thence I run S. 89°57' W. on a line line bet. secs. 3 and 10 On mountainous land Ascending on broken N.E. slopes In timber and undergrowth -
	39,97	Set a sandstone 18x7x6 in., 12 in. in the ground for 1/4 sec cor. marked 1/4 on st. face; raised a mound of stones 2 ft. base 15 ft. high N. of cor. Pits impracticable Thin cor. stands in the head of a gulch running N. 56° E. and 200 ft. above the sec. cor.
	56,50	Top of ridge bears N.W. and S.E. 190 ft. above 1/4 sec. cor. Begin descent on broken slope
	62,00	Head of gulch draining S. 60 ft. deep Ascending to
	66,70	Top of spur S. 57 ft. high -
		Begin descent
	68,90	Head of ravine draining S. 40 ft. deep Ascending on broken slope to
	78,50	Top of spur S. 90 ft. high Descending to
	79,94	The cor. of secs. 3-4-9 and 10. Land mountainous high broken plateau soil gravelly 3rd rate Timber, a few large pine trees scattering

Subdivision of T 39 S 189 N.

Chains	Mountainous land 79,944 chrs. -
44,00	S. 0° 2' W. on w random line bet. secs. 3 and 4 set 4 ft. 1/4 sec. cor.
78,32	Intersect N. bdy of T 39 S 189 N. of cor. of secs. 3-4-33 and 34 which is a stone firmly set marked and witnessed as described by the surveyor or general Set as brachylo stone 18 x 10 x 8 ins. 12 ins. in the ground for closing cor. of secs. 3 and 4 marked C.C. on S. and N. 3 gr. rods on E and W. faces raised as required 15 staves 2 ft. base 1 1/2 ft. high S. of cor. Post in brachylo I destroy markings on original cor. pertaining to secs. 3 and 4
	Hence 8 hrs.
24,00	S. 0° 2' E. on a line line bet. secs. 3 and 4 On mountainous and heavily timbered land Ascending Top of ridge bears 5.00° W. and 5.60° E. 160 ft above cor.
35,32	Hence on gradual ascent on N.E. slope so set a random 16 x 7 x 6 ins. 10 ins. in the ground for. in sec. cor. marked 1/4 on W. face; firm rock
	An oak tree 7 ins. diam. bears. S. + 8° 40' E. 28.0 ft. dist. marked 1/4 S. + 13. T.
	An oak tree 15 ins. diam. bears. S. 6° 25' W. 30.0 ft. dist. marked 1/4 S. + 13. T.
57,82	Top of ridge, and ridge bears about E and W Begin descent; leaving timber course E and W
75,32	Top cor. of secs. 3-4-9 and 10 This cor. stands 160 ft. below top of ridge Land mountainous high, rolling plateau Soil gravelly 3rd rate Timber aspen, oak, and pine, of small size and dense growth excepting pine which is of large size and scattering Mountainous and heavily timbered land.
78,32 chrs. -	November 10, 1898

Subdivision of T. 39 S. R. 9 W.

chains	November 11, 1895; at 8 ⁴⁵ a.m., I set off 37° 23' N. from the lat. arc 17° 30' " S. on the decl. arc and determine a true meridian with the solar at the cor. of sec. 4-5-32 and 33 on S. boundary of T. 39. Hence I run
	10° 3' W. bet. sec. 32 and 33
	On mountainous land
	Descending on slide in timber
3,25	Bottom of ravine 200 ft below cor., course N.W. Begin ascent on rocky point
10,00	Top of spur N. 130 ft above ravine Begin descent on N.W. slope
15,50	Bottom of slope bears N.E. and S.W.; entered creek bottom and leave timber; bears parallel with slope Hence on gradual descent
21,63	North Fork of Virgin River 1600 ft wide course S.W. in open gully 250 ft. below cor. Begin gradual ascent
24,50	Begin steep broken ascent course N 60° E and S 60° W. Enter scattering timber
30,00	Top of spur E. 80 ft high and beginning of descent
40,00	Set a sandstone 18 x 7 x 6 in. 12 in. in the ground for 1/4 sec. cor. marked 1/4 on S. face; raised a mound of stones 2 ft base 1 1/2 ft. high W. of cor. Pits impracticable
41,34	Bottom of ravine 60 ft deep course E Begin ascent on broken slopes
50,70	Set a sandstone 18 x 7 x 6 in. 12 in. in the ground for cor. of sec. 28-29-32 and 33 marked with 1 notch on S. and 4 notches on E. edges; raised a mound of stones 2 ft base 1 1/2 ft. high W. of cor. Pits impracticable
	This cor. stands 400 ft. above the 1/4 sec. cor. Land mountainous broken and rugged soil gravelly sandy and rocky on slopes; in creek bottom sandy loam 2 nd and 3 rd rate Timber, cedars and pine of small size, very scattering on mountainous land 8,000 ft. -
East on a random line bet. sec. 28 and 33 2d time 1/4 sec. cor.	

Subdivision

Station 79.72	Between N. and S. line & 000.5 of cor. of sec. 27-28-33 and 34
	Flower Creek S. 8° 0' 0" N. over base line bet. sec. 28 and 33 On mountainous land Ascending in dense undergrowth
12.00	Top of spur S 15° W 100 ft above cor. and beginning of descent Elder, larch, bear S. and S.
20.65	Dry wash in bottom of ravine 200 ft deep covered Begin ascent
39.80	Top of slope and spur S 25° E above wash
39.86	Soil consolidated 15' x 7 x 6 in. 12 in. in the ground for 14 sec. cor. scattered 14 on N. face; raised a amount of stones 2 ft. base 14 ft high N of cor. Pili impracticable
39.95	Begin descent
49.90	Bottom of ravine 15 ft deep and dry wash covered S. 25° E
	Begin ascent
68.00	Top of spur S. and beginning of descent 200 ft. above wash
70.30	Dry wash and bottom of ravine 50 ft deep covered S. 25° E
	Ascending bottom slope .5
79.72	The cor. of sec. 28-29-32 and 33 Land mountainous very broken Soil gravelly & slate Timber cedar and pines of small size and 100 ft scattering: Beneath, sage, and oak brush undergrowth Mountainous land 79.72 cha. -
	November 11, 1898. at this cor. I set off 17° 35' S. in the decl arc and at 11° 44' m a. m., last observed the sun on the meridian: the resulting latitude is 37° 24' N
	N 0° 3' W. bet. sec. 28 and 29
	On mountainous land.
10.60	Ascending in timber, on broken slope Land timber, bear S and SW.

Subdivision of T. 39 S. R. 9 W.

chains	
18.00	Top of spur 5.6° 200 ft above cor. and beginning of descent
20.64	Bottom of ravine 30 ft. deep course 5.60° E Ascending to
22.00	Top of ravine and beginning of gradual ascent
40.00	Set in sandstone 18x9x6 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face: raised a mound of stones 2 ft. base 1 1/2 ft. high N. of cor. Pits impracticable
75.10	Ravine 25 ft. deep course S. E.
80.00	Set in sandstone 18x11x6 ins. 12 ins. in the ground for cor. of secs. 20-21-28 and 29 marked with 2 notches on S. and 4 notches on E. edges: raised a mound of stones 2 ft. base 1 1/2 ft. high N. of cor. Pits impracticable Thin cor. stands 5 or 6 ft. above the cor. of secs. 26-29-32 and 33 Land mountainous broken and rolling Soil gravelly 3rd rate
	Timber scrubby cedars scattering Dense oak brush undergrowth Mountainous land 80,000 chs. -
40.00	18905' 7' E on a random line bet. sec. 21 and 28 Set limb 1/4 sec. cor.
79.80	Intersect N and S. line at cor. of secs. 21-22-27 and 28 Thence S. run S. 89° 5' 7" W. on a true line bet. secs. 21 and 28 On mountainous land ascending on rolling slope in dense oak brush
38.80	Top of spur S. 26° E. 300 ft. above cor. Begin abrupt descent
39.90	Set in sandstone 18x7x6 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face from which A pinion tree 14 ins. diam. bears S. 44° E. 13 ft. dist. marked 1/4 8 28 B.T.
	A cedar tree 12 ins. diam. bears N 18° 30' W. 33 ft. dist. marked 1/4 5 21 B.T.
44.02	Stream 4 chs. wide in bottom of narrow ravine 180 ft. deep: course S. 25° E.
	Begin ascent
40.80	Top of ravine 200 ft. above stream and beginning

Subdivision of T. 39 S. 19.9 mi.

chain
79,800 of gradual ascent on broken slope.
The cor. of secs. 20-21-28 and 29
This cor. stands 430 ft above the cor. of secs. 21-
22-27 and 28
Land mountainous broken and rolling
Soil gravelly and rocky 3rd rate
Timber: a few scrubby cedar in ravine
Dense oak brush undergrowth -
Mountainous land 79,800 chs. -

November 11, 1898

November 12, 1898: On river

$10^{\circ} 3' W$ bet. secs. 20 and 21

On mountainous land

Ascending on broken slopes, in dense oak brush

35,000 Top of ridge 400 ft above cor. course E. and w.

Begin descent

40,000 Set a sandstone 20 x 9 x 7 in. 16 in. in the ground
for 1/4 sec. cor. marked 1/4 cor. w. face: raised a
mound of stones 2 ft. basal 1 1/2 ft. high w. of cor.
Pits impracticable

42,500 Bottom of gulch draining E. 175 ft deep

Begin ascent on steep rocky slope of break course
E. and w.

46,000 Easter scattering timber bears E. and w.

50,000 Set a sandstone 26 x 9 x 5 in. 19 in. in the ground
for cor. of secs. 16-17-20 and 25 marked with 4 notches
on E. and 3 notches on S. edges: raised a
mound of stones 2 ft. basal 1 1/2 ft. high w. of cor.
Pits impracticable

This cor. stands about 800 ft. above the bottom of
gulch. -

Land mountainous very rugged

Soil gravelly and rocky 4th rate

Timber scrubby cedar scattering

Dense oak brush undergrowth -

Mountainous land 80,000 chs. -

189-57: E on a random line bet. secs. 16 and 21

4,000 Set Temp 1/4 sec. cor.

8,000 Intersect N and S. line 18 ft. N of cor. of secs. 15-

Subdivision of T. 37 S. R. 9 W.

chain	16-21 and 22 Thence down N. 89° 5' 5" W. on a line bet. secs. 16 and 21. On mountainous land Ascending, in oak brush
300	Top of ridge bears N. and S. 40 ft. above cor. Thence on gradual descent on steep S. slope on edge of break
33,60	Edge of vertical sandstone break 200 ft. deep course N. 20° W. and S. 20° E.
37,20	Bottom of break and beginning of descent to dry wash and bottom of ravine courses. Begin ascent
40,00	Below sandstone 18 x 18 x 9 in. 2 courses. The ground for 1/4 sec. cor. marked 1/4 on N. face; raised a minimum of about 2 ft. base 1/2 ft. height N. of cor. Pits impracticable
41,35	Foot of vertical sandstone break 200 ft. high course N. E. and S. W.
41,46	Top of break and beginning of gradual ascent
61,00	Top of ridge bears N. and S. 180 ft. high Begin steep descent on broken slope W.
75,10	Edge of vertical sandstone break 200 ft. deep course N. 70° W. and S. 70° E.
75,19	Bottom of break: thence on S. slope W-
- 8,000	The cor. of secs. 16-17-20 and 21 Land mountainous very rugged soil rocky and gravelly 4th rate no timber: Mountainous land 80,00 chs. - November 12, 1898: The sky being overcast during the noon hour I was unable to observe the sun on the meridian

	N 0° 3' W. bet. secs. 16 and 17 On mountainous land Ascending steep slope
1,60	Foot of perpendicular sandstone break 200 ft. high bears N 70° W. and S. 70° E
1,62	Top of break and beginning of broken ascent on side of ravine. S. W. slope: in timber

Subdivision of T. 39 S. 12.9. W.

chain	
25.50	Top of spur or. 450 ft. above cor. Leave timber course E and W and begin descent
33.00	Bottom of ravine 100 ft. deep course W. Begin ascent on W. slope on broken plateau'
40.00	Set at sandstone 18x10x6 in., 12 in., in the ground for 1/4 sec. cor. marked 1/4 on N. face; raised a mound of stones 2 ft. base 1 1/2 ft. high N. of cor. Site impracticable
47.40	Head of ravine draining S 20° W.
62.50	Top of ridge bears E. and W. 300 ft. high Begin descent
80.00	Set at sandstone 26x9x6 in., 19 in., in the ground for cor. of sec. 8-9-16 and 17 marked with 4 notches on S. and E. edges; raised a mound of stones 2 ft. base 1 1/2 ft. high N. of cor. - Site impracticable - This cor. stands 170 ft. below top of ridge Land mountainous very rugged Soil rocky and gravelly 4± rate Timber scrubby cedar and firion scattering Mountainous land 80.00 chs. -
	589-055-1' E on a random line bet. secs. 9 and 16
40.00	Set limb. 1/4 sec. cor.
79.78	Intersect N. and S. line 42 chs. S of cor. of secs. 9-10-15 and 16 Hence I run
	589-047-1' W on a true line bet. secs. 9 and 16
	On mountainous land
	Descending on S.W. slope
21.20	Bottom of gulch 250 ft. below cor. course N. 15° W Acadia and small spring claimed by Mrs. Smith bear N. 20° W 200 chs. Begin ascent on spur E.
39.89	Set at sandstone 18x9x6 in., 12 in., in the ground for 1/4 sec. cor. marked 1/4 on N. face; raised a mound of stones 2 ft. base 1 1/2 ft. high N. of cor. Site impracticable - A fine tree 36 in. diam. bear N. 47° 1' W. 109 chs. dist. scribed 145.9 ft.
40.00	Top of spur and ridge running N. and S. 200 ft

Subdivision of T. 39 S. R. 9 W.

chain 47.20	high and beginning of descent Bottom of gulch 90 ft deep course N 30° E. at about 200 chs N. of its head Ascending to
55.80	Top of ridge bears N. W. and S. E. 80 ft high. Begin descent
78.08	Bottom of wash 200 ft below top of ridge course N 50° E.
.. .	Ascending to
79.78	The cor. of sec. 8-9-16 and 17 Land mountainous, high broken plateau Soil gravelly 3rd rate Timber, a few large pine trees scattering Dense oak brush undergrowth - Mountainous land 79.78 chs.
	November 11, 1898: at 445 m p m, I mt. & set off 37° 26' 30' West the lat. arc 17° 52' S. on which are and determine a true meridian with the solar at the cor. of sec. 8-9-16 and 17; thence I run N 0° 3' W. bet. sec. 8 and 9
	On mountainous land
	Descending
9.60	Bottom of wash course N 20° W and beginning of rocky broken W. slope on side of cañon Earlier timber course parallel with wash
30.40	Top of spur N. W. 150 ft below cor. and beginning of descent on N. slope
36.40	Leave timber course E and W. and begin gradual descent in bottom of gulch 150 ft deep course E and W.
4,000	Set a sandstone 24 x 10 x 6 in. 18 in. in the ground for 1/4 sec. cor. marked 1/4 sec. W. face: raised a mound of stones 2 ft. base 1 1/2 ft high W. of cor. Pitt imperceptible
	A sheep coral 100 ft. diam. bears W. 124 chs.
	And Sawyer sawmill bears W. about 10 chs.
44.61	Dry wash and road to sawmill course S. 80° W. Begin ascent on broken slope
8,000	Set a sandstone 18 x 9 x 6 in. 12 in. in the ground for cor. of sec. 4-5-8 and 9 marked with 5 notches on S and 4 notches on E. edges raised a mound of stones 2 ft. base 1 1/2 ft.

Subdivision of T. 39 S. R. 9 W.

chains high w. of cor. Pili impractical.
 Thin cor. stands 280 ft. above wash.
 Land mountainous, high broken plateau
 Soil gravelly and rocky 4th ratio.
 Timber, pine of fair size
 Dense oak brush undergrowth.
 Mountainous land 80,000 chs. -

November 12, 1898

- November 13, 1898 I run
 N. 89° 47' E on a random line bet. sec. 4 and 9
 Ret. comp. 1/4 sec. cor.
 Intersect N. and S. line 30 chs. N. of cor. of sec. 3-4-
 9 and 10
 Thence I run
 West on a true line bet. sec. 4 and 9
 On mountainous land
 Descending; in dense oak brush on west side slope
 Bottom of ravine 100 ft. deep crossed S.
 Ascending to
 Top of spur. S. 80 ft. high and beginning of
 gradual descent
 33,34. Wagon road from Cedar City to North Fork bears
 1.66° W. and S. 65° E.
 35,72. Fenced runs S. about 200 chs. and N. about 400 chs.
 Enter Wm Smith's potato patch
 37,69. Fenced bears N. and S. leaves cultivated land
 38,14. Spring branch 2 chs. wide flows S in bottom of
 gulch 150 ft. deep -
 Wm Smith's cabin bears N. about 10,000 chs. old
 Begin ascent
 Set a sandstone 18 x 9 x 6 in. 12 in. in the ground
 for 1/4 sec. cor. marked 1/4 sec. N. face: raised
 a mound of stones 2 ft. base 1 1/2 ft. high N. of
 cor. Pili impractical
 48,50. Top of spur. S. 120 ft. high and beginning of descent
 Bottom of gulch 75 ft. deep crossed S.
 Begin ascent on rolling slope to
 The cor. of secs. 4-5-8 and 9
 This cor. stands 150 ft. above bottom of gulch
 Land mountainous, high broken plateau

Subdivision of T. 39 S. R. 9 W.

chain	soil gravelly 3rd rate no timber. Dead oak brush undergrowth. Mountainous land 79.76 acrs. -
4,000	40° 3' W. on a random line bet. secs. 4 and 5 - set limb 1/4 sec. cor.
77,45	Intersection N. bdy. of Th. 1.33 chs. W. of cor. of secs. 4-5- 32 and 33 which is a stone firmly set marked and witnessed as described by the surveyor general set a black lava rock 18x10x7 in., 12 in. in the ground for closing cor. of secs. 4 and 5 marked C.C. on S. with 8 grooves on E and 2 grooves on W. faces. I raised a mound of stones 2 ft. base 1 1/2 ft high S. of cor.. Pitt impracticable I destroy markings on original cor. pertaining to secs. 4 and 5. Hence I run S. 0° 3' E. on a true line bet. secs. 4 and 5 -
	On mountainous land
24,08	Ascending gradually on broken slope Wagonnable from Cedar City to North Fork Bear's E. and W.
2200	100 ft. above cor.: tip of slope bears E. and W. Begin descent
24,55	Dry wash in bottom of rocky ravine 50 ft. deep bears S. 70° W.
	Begin ascent
30,00	Top of ridge 90 ft. high runs parallel with wash Begin gradual descent on broken slope
37,45	Set a black lava rock 18x10x6 in., 12 in. in the ground for. 1/4 sec. cor. marked 1/4 and W. faces; raised a mound of stones 2 ft. base 1 1/2 ft. high W. of cor. Pitt impracticable
54,80	Bottom of draw draining W. 150 ft. below tip of ridge. and beginning of ascent on rolling slope
66,00	Top of ridge 80 ft. high bears E. and W. Begin descent on gradual slope to
77,45	The cor. of secs. 4-5-8 and 9 Land mountainous high broken plateau Soil gravelly and rocky 3rd rate Timber: a few large pine trees scattering

A-206
Subdivision of T. 39 S. R. 9 W.

chain	Mountainous land 77.45 chs. November 13, 1898: at this cor. I set off $18^{\circ} 07' S.$ on the decl. arc and at $114^{\circ} 45' W.$ a m., I just observed the sun on the meridian; the resulting lat. is $37^{\circ} 27' N.$
	At the cor. of secos. 5-6-31 and 32 on S. bdy. of Tp. at $2^{\circ} 40' E.$ p.m. I set November 13. I set off $37^{\circ} 23' N.$ on the decl. arc $18^{\circ} 08'$ "S. on the decl. arc and determine a true meridian with the solar; thence I run $10^{\circ} 9' E.$ bet. secos. 31 and 32
	On mountainous land
0.17	North bank of North Fork of Virgin River course with 10 chs wide Shaded in bottom of canyon, no timber and underground
3.60	Foot of <i>Sophronicae sandstone</i> broken soft light brown and white.
	Began abrupt ascent
3.67	Top of break and beginning of steep ascent
40.74	Abt. a sandstone $10 \times 10 \times 6$ ins. 12 ins. in the ground for 14 chs. or. marked the end N. face; found which a cedar tree 6 ins. diam. bears $45^{\circ} 33' N.$. $35^{\circ} 08' E.$ dist. marked 44 S 31 D. T.
	A cedar tree 10 ins. diam. bears $45^{\circ} 33' N.$. $35^{\circ} 08' E.$ dist. marked 44 S 32 D. T. --
	Raised a mound of stones 2 ft. high $1\frac{1}{2}$ ft. high W. of cor.
60.05	Land timber covered E and S. --
	Ascent becomes more gradual and rolling
80.00	Abt. a sandstone $10 \times 11 \times 6$ ins. 12 ins. in the ground for cor. of secos. 29-30-31 and 32 marked with 1 inch on S. and 5 inches on E. edges: raised a mound of stones 2 ft. high $1\frac{1}{2}$ ft. high W. of cor. Pits impracticable
	This cor. stands 1100 ft. above the cor. on Tp. line Land mountainous very rugged soil gravelly and rocky 4 ft. slate
	Timber cedar of small size and scattering pine of good size. -
	Mountainous land 80.00 chs. -
	November 13, 1898.

Subdivision of T. 39 S. 18.9 W.

		November 14, 1898: at 8 ^h 10 ^m a.m., I set out 37° 24' N. of the lat. and 18° 18' E. of the long. and determine a true meridian with the solar al- timeter of secos. 29-30-31 and 32; thence I run East on a random line bet. secos 29 and 32 Set comp. 1/4 sec. cor.
chains	4000	Intersect N. and S. line at cor. of secos. 28-29-32 and 33 Thence I run West on a true line bet. secos. 29 and 32 On mountainous land. Ascending gradually on rolling slope Scattering timber, and undergrowth - Top. of slope and spurs 5. 200 ft above cor. Begin descent
	22,50	Dry wash in bottom of ravine 60 ft. deep covered S. Ascending on rolling surface
	25,50	Set w sandstone 18 x 92 6 in. 12 in. in the ground for 1/4 sec cor. marked 1/4 on N. face: raised a mound of stones 2 ft. base 1 1/2 ft. high N. of cor. Pile impermeable
	40,04	The cor. of secos. 29-30-31 and 32 This cor. stands about 300 ft. above the cor. of secos 28-29-32 and 33 Land Mountainous broken and rolling Soil gravelly 3rd rate. Timber: scrubby cedar very scattering Dense oak and thorn undergrowth - Mountainous land 80,08 chs. -
	80,08	West on a random line bet. secos. 30 and 31 Set comp 1/4 sec cor.
	40,00	Intersect N. bdy. of Tp. 7 like N. of cor. of secos. 25- 30-31 and 36 Thence I run N 89° 57' E on a true line bet. secos. 30 and 31 On Mountainous land Ascending in broken S. slopes in scattering timber
	80,60	Top of spur. 130 ft. above cor. runs S. Begin descent on rolling slope to -
	18,70	Set w sandstone 24 x 1/2 x 8 in. 18 in. in the ground
	40,62	

Subdivision of T. 39 S. 12. 9 W.

chains	for. 114 sec. cor. marked 114 on N. face, from which a pinion tree 5 ins. diam. bears $5.32^{\circ} E$ 21 lbs. dist. marked 114 S. 31 13. T. A pinion tree 4 ins. diam. bears $1.28^{\circ} N$. 2 lbs. dist. marked 114 S. 30 13. T.
44, 25	Bottome of ravine 100 ft. deep course $5.30^{\circ} E$. Ascending to
45, 20	Top of spur 150 ft. high, runs S Begin descent
54, 00	Bottome of ravine 100 ft. deep course $5.10^{\circ} N$. ascending on broken slope to
72, 30	Top of spur 5.300 ft. above sec. cor. and beginning of descent
50, 60	The cor. of secs. 29-30-31 and 32 Land mountainous broken and rolling soil gravelly and rocky 4 ft. calc. Timber. scrubby cedar and pinion scattering mountainous land 80,6-0 chr. - November 14, 1898: at this cor I set off $18^{\circ} 23' .15$ on the dell. arc and at 114 45' W. a. m. 2 m. t. observed the sun on the meridian the resulting lat. is $37^{\circ} 24' N$

	40' 3' W. bet. secs. 29 and 30 On mountainous land Ascending on broken slope, in scattering timber Set a sandstone 18x10x8 ins. 12 ins. in the ground for 114 sec. cor. marked 114 on N. face; raised a mound of stones 2 ft. base 1½ ft. high W. of cor. Pits impracticable This cor. stands in the head of a draw draining E.
66, 00	Top of slope 320 ft. above cor. of sec. course E- and W Begin gradual ascent; leaving timber parallel with ridge Set a sandstone 17x9x7 ins. 11 ins. in the ground for cor. of secs. 19-20-29 and 30 marked with 2 notches on S. and 6 notches on E. edges; raised a mound of stones 2 ft. base 1½ ft. high W. of cor. Pits impracticable. - Land mountainous broken and rolling

Subdivision of T. 39 S. R. 9 W.

chains	Soil gravelly 3 rd rate Timbered; scrubby cedar and piñon scattering Mountainous land 8,000 chs. -
4,000	East on a random line bet. secs. 20 and 29 Set comp. 1/4 sec. cor.
8,000	Intersect N.-and S.-line 10 lbs. S. of cor. of secs. 20-21-28 and 29 Thence S. run N 89° 5' W. on a line bet. secs. 20 and 29 On mountainous land
1,18	Descending broken slope; in oak brush Bottom of wash 20 ft. deep course S. 25° E
4,000	Begin gradual ascent on rolling slope Set at sandstone 24 x 7 x 6 inns. 18 in. in the ground for 1/4 sec. cor. marked 1/4 on N. face; raised at mouth of ravine 2 ft. base 1 1/2 ft. high S. of cor. - Ridge impracticable
8,000	The cor. of secs. 19-20-29 and 30 This cor. stands 250 ft. above the cor. of secs. 20-21 28 and 29 Land mountainous, broken and rolling Soil gravelly 3 rd rate No timber; dense oak brush underground - Mountainous land 8,000 chs. -
4,000	N 89° 5' W. on a random line bet. secs. 19 and 30 Set comp. 1/4 sec. cor.
8,000	Intersect W. bdy. of Th. 8 lbs. S. of cor. of secs. 19-24 25 and 30 Thence S. run East on a line bet. secs. 19 and 30 On mountainous land Descending, in timber
0.50	Bottom of ravine 15 ft. below cor. course S. W. Begin ascent on broken S. W. slope
2,320	Bottom of ravine 40 ft. deep course S. W.
4,000	Set at sandstone 18 x 10 x 6 inns. 12 in. in the ground for 1/4 sec. cor. marked 1/4 on N. face; from which W. juniper tree 11 in. diam. bears. N 50° 07' E. 41 lbs.

Subdivision of T. 39 S. R. 9 W.

chains	dist. marked 144 S. 19 B.T. A piñon tree 10 in. diam. bears S. $3^{\circ} 23' E$ 17 ft. abov dist. marked 144 S. 30 B.T. This cor stands on top of spur 5. 450 ft above sec cor and highest point on line Begin descent on S.E. slope
50,50	Bottow of steep slope bears N. $65^{\circ} E$. and S. $66^{\circ} W$. Then descending on gradual rolling slope to
50,66	The cor. of secs. 19-20-29 and 30 This cor stands 200 ft below top of spur and 144 sec cor. Land mountainous broken slope Soil gravelly and rocky 4th rate Timber scrubby piñon and cedar scattering over W $\frac{1}{2}$ mile balance dense oak brush Mountainous land 80,66 chs. -

November 14, 1898

November 15: 0 and	
N 0° 3' W. bet. sec. 19 and 20	
On mountainous land	
10,00	Ascending gradually in dense oak brush Top of rocky, steep slope bears E. and W.
4,000	Leave oak brush and enter scattering timber Set w sandstone 18 x 10 x 6 in. 12 in. in the ground for 1/4 sec cor marked W on W face; raised a mound of stones 2 ft. base 1 1/2 ft. high W. of cor. Pits impracticable
53,65	Top of perpendicular sandstone break 130 ft. high bears E and W.
53,70	Top of break and beginning of ascent in loose soil
56,31	Top of slope; enter rolling plateau course E. and W. about 1800 ft. above sec cor.
8,000	Begin gradual descent on rolling slope; leaving timber Set w sandstone 18 x 10 x 6 in. 12 in. in the ground for cor. of sec. 17-18-19 and 20 marked with 3 notches on S. and 5 notches on E. edges; raised a mound of stones 2 ft. base 1 1/2 ft. high W. of cor. Pits impracticable
	Land mountainous very rugged Soil gravelly and rocky 4th rate

Subdivision of T. 39 S. 12. 9 W.

Chains	Timber: scrubby cedar and pinyon scattering Mountainous land 8,000 chs. -
4,000	S-89°56' E. on a random line bet. sec. 17 and 20 Set comp. 1/4 sec. cor.
80.16	Intersect N. and S. line at cor. of sec. 16-17-20 and 21 Thence I run N 89°56' W. on a true line bet. sec. 17 and 20 On mountainous land Descending on rocky, steep slopes at foot of break
5.50	Streams 2 hrs. wide. flows S. in bottoms of ravines Begin ascent
8.70	Foot of break 150 ft high bears N. and S.
8.90	Top of break and beginning of steep ascent on plateau
34.00	Ascent becomes gradual
4,008	Set on sandstone 17 x 10 x 7 ins. 11 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face from which A pine tree 22 ins. diam. bears N 42° 58' E. 1,600 chs. dist. marked 1/4 S. 17 R.T. no other trees within limit; raised a mound of stones 2 ft. base 1 1/2 ft. high N. of cor. Pile impracticable
6,100	Top of ridge bears N and S 450 ft above sec. cor. Begin descent
75.74	Bottom of gulch 140 ft. below ridge crossed N 20' W Begin ascent
80.16	The cor. of sec. 17-18-19 and 20 Land mountainous very rugged Soil gravelly and rocky 3rd and 4th rate No timber; dense oak brush undergrowth Mountainous land 80.16 chs. - November 15, 1898: The sky being overcast during the noon hour I could not observe the sun on the meridian. -
4,000	West on a random line bet. sec. 18 and 19 Set comp. 1/4 sec. cor.
80.74	Intersect N. bdg. of Tp. 12 hrs. S. of cor. of sec. 13- 18-19 and 24 Thence I run

Subdivision of T. 39 S. 17 W.

chain	S. 59° 0' 55" E. on a true line bet. recs. 18 and 19 On mountainous land
15.00	Descending and steep at w. slope in timber and oak brush
40.74	Ascent becomes rocky and broken Face of perpendicular sandstone break 10 ft. high, course S. 75° W. and S. 75° E. marked 14 ft. above ground for 14 sec. cor. from which
	A pine tree 12 in. diam. bears S. 25° 5' W. 25 ft. dist. marked 14 S. 19 B.T.
	A pine tree 5 in. diam. bears N. 34° 0' 5" E. 23 ft. dist. marked 14 S. 18 B.T.
	Raised w. around of stones 2 ft. high 15 ft. high N. of cor.
47.85	Top. Steep rocky ascent bears N. 8 and S. W. 1200 ft. above sec. cor.;
57.00	Entered plateau and gradual ascent
	Top of ridge bears N. and S.
57.10	Begin descent
	Bottom of ravine 90 ft. deep course of descending
63.34	Top of ridge N
	Begin descent leaving timber
80.74	The cor. of recs. 17-18-19 and 20 Land mountainous very broken Soil gravelly and rocky at the surface Timber fine of fair size but scattering growth Mountainous land 80.74 chs.-

November 15: 1895: at 3435 m.p.m., 7 m.t. I set off
 $37^{\circ} 25' 30''$ for the lat. and $18^{\circ} 38' 5.00$ the decl.
 and determine a true meridian with the
 solar at the cor. of recs. 17-18-19 and 20
 Hence I run

N 0° 3' W. bet. recs. 17 and 18

On mountainous land

Descending; in oak brush

11.65 Dry wash in head of canon course N. 100 ft. below cor.
 Begin ascent

24.00 Top of ridge 130 ft. high. bears E. and W.
 A partly finished small cabin close to a small spring

Subdivision of T. 39 S. R. 9 W.

chains	bears N. 40° chn.-unmeasured and owner not known Begin descent on broken N.E. slope
4,000	Set at sandstone 10 x 7 x 6 ins. 12 ins. in the ground for 1/4 sec. cor. marked 44 on N.W. face; raised a mound of stones 2 ft. base 1 1/2 ft. high N. of cor. Pits impracticable
5,880	Beginning of steep rocky descent bears N. N. and S. E. Entered timber
7,025	Bottom of canon 300 ft. deep crossed N. W. Begin ascent
8,000	Set at sandstone 30 x 9 x 8 ins. in a mound of stones 3 ft. base 2 ft. high on rocky surface for cor. of secs. 7-8-17 and 18 marked with 4 notches on S. and 5 notches on E. edges from which A cedar tree 14 ins. diam. bears S 58° 20' E 36.882. dist. marked T 39 S R 9 W S. 17 B.T.
	A junior tree 9 ins. diam. bears N 25° 5' E 15.882. dist marked T 39 S R 9 W S. 8. B.T.
	No other trees within limit - Pits impracticable This cor. stands 300 ft. above bottom of canon Land mountainous very rugged Soil gravelly and rocky 3 rd and 4 th rate Timber, cedar, juniper and pine scattering Mountainous land 8,000 chn.
	November 15, 1898

	November 16, 1898 at 8 ⁴¹ 6 ^m a.m., 7 m.t. I set off 37026' 30° on the lat. arc 18° 49' S. on the decl. arc and determine a true meridian with the solar at the cor. of secs. 7-8-17 and 18. Since I run S 89° 56' E on a random line bet. secs. 8 and 17
4,000	Set temps. 44 sec. cor.
8,010	Intersect N. and S. line 10 lbs S. of cor. of secs. 8- 9-16 and 17
	Then I run
	West on a true line bet. secs. 8 and 17
	On mountainous land
	Ascending on rolling slope, in dense oak brush
8,000	Top of spur N 80 ft. high and beginning of gradual descent
14,300	Bottom of ravine crossed N. 30° E. 50 ft. deep

Subdivision of T. 39 S. 12 W.

Chain	Begin ascent
22.00	A cabin claimed by Alfred Lundell close to a small spring having no discharge, bears S. about 12.00 chm.
35.70	Top of spur N. and beginning of descent
40.05	Set at sandstone 18 x 9 x 4 in., 12 in. in the ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ sec. N. face: raised a mound of stones 2 ft. base 1 $\frac{1}{2}$ ft. high N. of cor. Pits impracticable
40.50	Bottom of wash, draining N. 28° E. and beginning of ascent
50.70	Top of ridge bears N. and S. 210 ft above sec. cor. Begin descent on rolling slope
75.00	Beginning of steep rocky descent bears N. 20° W. and S. 20° E.
80.10	The cor. of sect. 7-8-17 and 18 This cor. straddles 300 ft. below top of ridge Land mountainous broken and rolling Soil rocky, 3 $\frac{1}{2}$ in. later No timber: dense oak brush undergrowth Mountainous land 80.10 chm. -
	189.55' H. on a random line bet. sect. 7 and 18
40.00	Set limb $\frac{1}{4}$ sec. cor.
50.70	Intersect N. bdy of Th. 12 sec. N. of cor. of 2000. 7-12-13 and 18 Hence 1 sec.
	East over a true line bet. secs. 7 and 18
	On mountainous land
40.70	Ascending on steep rocky S. W. slope no timber Set at sandstone 18 x 11 x 6 in., 12 in. in the ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ sec. N. face raised a mound of stones 2 ft. base 1 $\frac{1}{2}$ ft. high N. of cor. Pits impracticable. -
43.50	Top of plateau and spur N. 850 ft above sec. cor. Begin gradual descent
52.00	Begin steep rocky descent across N. W. and S. E.
70.65	Bottom of Canon 400 ft deep course N. W. Ascending to
80.70	The cor. of secs. 7-8-17 and 18 Land Mountainous very rugged Soil rocky

Subdivision of T. 39 S. R. 9 W.

Chains	<p>Timber pine of good size scattering, and pines and cedar of small size</p> <p>Mountain land 80.70 elev.</p> <p>November 16. 1898 at this cor. I set off $18^{\circ}5'3.5''$ on the decl arc and at $11^{\circ}45''$ a.m. I must observe the sun on the meridian & the resulting lat. is $37^{\circ}26'30''N$</p>
8.05	<p>$N 0^{\circ} 3' W.$ bet. secs. 7 and 8</p> <p>On mountainous land</p> <p>Ascending in steep rocky slope in timber</p> <p>Top of rocky slope bears $N. 20^{\circ}22'$ and $S. 20^{\circ}6'$</p> <p>Leave timber and enter dense oak brush</p> <p>Ascent becomes rolling</p>
21.30	<p>Top of spur N. 215 ft above cor. and beginning of descent</p>
32.60	<p>Edge of steep rocky descent bears about E. and W.</p> <p>Enter timber, parallel with slope</p>
40.00	<p>Set at sandstone $24 \times 9 \times 9$ ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face from which A fine tree 7 in. diam. bears $S. 71^{\circ}20' W.$ 35 ft. dist. marked 1/4 S. 7 13. T.</p> <p>A fine tree 14 in. diam. bears $N. 62^{\circ} E.$ 44 ft. dist. dist. marked 1/4 S. 8 13. T.</p> <p>Raised a mound of stones 2 ft. base 1/2 ft. high W. of cor.</p>
48.50	<p>Dry Wash and bottom of canon 550 ft below top of spur corresp. S. $60^{\circ}W.$</p> <p>This is known as Corn Canon</p>
52.50	<p>Top of canon course S. W. 280 ft above wash and beginning of gradual ascent, leaving timber</p>
78.00	<p>Top of slope bears E. and W. 190 ft high</p> <p>Begin descent</p>
- 5.00	<p>Set at black lava stone $18 \times 11 \times 9$ ins. 12 ins. in the ground for cor. of secs. 5-6-7 and 8 marked with 5 switches on S. and E. edges; raised w mound of stones 2 ft. base 1/2 ft high W. of cor.</p> <p>Pits impracticable -</p> <p>Land mountainous very broken soil gravelly and rocky 3rd rate</p> <p>Timber pine of large size</p>

Subdivision of T. 39 S., R. 9 W.

chains	Mountainous land 8,000 acrs.
4,000	Walk on a random line bet. secs. 5 and 8 Set compass. 1/4 sec. cor.
8,002	Intersect sec. 5 and 8 line 8' 0" N. of cor. of secs. 4-5-8 and 9 Thence S. 45° E. A 89° 57' W. on a true line bet. secs. 5 and 8 On mountainous land Ascending; in oak brush
9,50	Top of ridge bears N. and S. 80 ft. high Begin descent on rolling slope
4,070	Set a candler tree 17 x 7 x 6 in. 11 in. in the ground for. 1/4 sec. cor. marked the end of face; raised a mound of stones 2 ft. back 1/2 ft. high N. of cor. Piki impracticable
52.00	Top of steep rocky descent bears N.E. and S.W.
55.80	Bottom of cañon 3.5 ft. deep crosses S.W. 350 ft. below ridge Begin ascent
62.50	Top of cañon and beginning of gradual ascent
77.00	Top of ridge bears N. and S. Begin gradual descent
87.50	The cor. of sec. 5-6-7 and 8 Land Mountainous broken and rolling Soil gravelly 3rd rate Timber: scattering pine trees in cañons Mountainous land 8,000 acrs. -

November 16, 1898

	November 17, 1898 Journal
4,000	Walk on a random line bet. secs. 6 and 7 Set compass 1/4 sec. cor.
80.62	Intersect W. bdy of Twp. 14 Secs. N. of cor. of secs. 1-6-7 and 12 Thence S. 45° E.
	A 89° 57' E. on a true line bet. secs. 6 and 7 On mountainous land Ascending, gradually, in dense oak brush
240	Top of spur 5, and beginning of descent Bottom of ravine 3.0 ft. deep crosses
34.2	Begin steep rocky ascent crossed N. and S.

Subdivision of T. 39 S. 18.9 sec.

Chains	
33.20	Top of rocky point of plateau running S. 30° W. and breaking abruptly 2 chs. S. of corner 800 ft. above cor. begin abrupt descent course N. E. and S. W.
36.40	Beg. a sandstone 20 x 9 x 7 inns. 21 in. in a mound of stones 3 ft. base 2 ft. higher on rocky bottom for 1/4 sec. cor. marked 1/4 sec. N. face: Piti impracticable
40.62	Set a sandstone 20 x 9 x 7 inns. 21 in. in a mound of stones 3 ft. base 2 ft. higher on rocky bottom for 1/4 sec. cor. marked 1/4 sec. N. face: Piti impracticable
59.05	Bottom of narrow rocky gullies and stream 5 chs. wide course S. 60° W. 700 ft below top of point Begin ascent
74.90	Top of gullies bears N. E. and S. W. and beginning of gradual ascent 300 ft. above stream
80.62	The cor. of secs. 5-6-7 and 8 Land mountainous, very broken Soil gravelly and rocky 4th rate Timber: fine and puny in gullies Mountainous land 80.62 chs. -
40.00	N 0° 3' W. on a random line bet. secs 5 and 6 Set. temp. 1/4 sec. cor.
76.95	Intersect N. bdy of Twp. line S. 18.9 sec. 22' W. of cor. of secs. 5-6-31 and 32 which is a stone firmly set marked and whitewashed as described by the surveyor general Set a sandstone 18 x 10 x 6 inns. 12 in. in ground for closing cor. of secs. 5 and 6 marked C.C. on S. with 5 grooves on E. and 1 groove W. faces; raised a mound of stones 2 ft. base 1 1/2 ft. high S. of cor. Piti impracticable..- Sacrifice all markings on original cor. pertaining to this Twp. Hence C. cor. S 0° 3' E on a true line bet. secs. 5 and 6 On mountainous land Descending gradually on broken rolling plateau Set a sandstone 18 x 10 x 5 inns. 12 in. in the ground for 1/4 sec. cor. marked 1/4 sec. W. face found which A pine tree 30 inns. diam. bears. S 60° 20' W. 87 ft. dist. marked 1/4 S. 6 B.T. in other trees within limit: raised a mound of stones 2 ft. base 1 1/2 ft. high W. of cor. Piti impracticable.-

Subdivision of T 39 S 17 W.

chains 4150	Dry wash in ravine 30 ft deep and 200 ft below cur. of sec. course S. 75° E. - and beginning of ascent
4390	Top of spur E. Descent in
55.95	Bottom of gulch and dry wash from N 20° E turn S. 150 ft deep.
59.96	Lead wash turns S. 30° W and begins steep rocky ascent
73.70	Top of gulch bears N E and S. 111° 130 ft above wash Ascending gradually to
76.95	The cor. of sec. 5-6-7 and 8 Land numerous broken high plateaus soil gravelly and rocky 4th order No timber Rocks numerous sand 76.95 chs. -
	November 17, 1898: at this cor. I set off 19' 07" "S. on the decl. arc and at 11° 45' 00" N sec. 7 not observe the sun on the meridian: the resulting lat. is 37° 27'

Finding that my survey does not close on the
N. bdy. of Tp. within its limit I made a
retracement of said N. bdy. as follows.

From the cor. of Tps. 38 and 39 S. R. 9 and 10 W as
hereinbefore described I run

East on a retrace ment line bet. sec. 6 and 31

81.84 The cor. of sec. 31 and 32 as hereinbefore described
bears S. 2.33 chs. and the course of the line is
therefore S 88° 22' E. and the distance 81.87 chs. -

At the cor. of sec. 32 and 33 on S bdy of Tp 38 S. R
9 W. as hereinbefore described, at 345' p.m.,
I set off 37° 28' on the lat. arc 19° 18' 30" S
on the decl. arc and determined a true meridian
with the solar, plumb line

East on a retrace ment line bet. sec. 4 and 33

80,000 The cor. of sec. 33 and 34 as hereinbefore described
bears N. 88° 22' E. and the course of the line is therefore
N 89° 22' E.

November 17. 1898.

Subdivision of T. 39 S. R 9 W. (Retracement of N. 6dgs.)

chain	November 18. 1898 at 8 ^h 47 ^m a.m., I set off 37° 28' over the lat. arc 19° 19' S on the decl. arc and determine a true meridian with the solar at the cor. of secs. 33 and 34 on S. bdy of Tps. 38 S. R 9 W. thence I now
51,40	East on a retracement line bet. secs 3 and 34 The cor. of secs. 34 and 35 as hereinbefore described bears N 1,30° chs and the bearing of the line is therefore N 89° 05' E. and the distance 51,40 chs. -
77,50	East on a retracement line bet. secs 2 and 35 The cor. of secs. 1-2-35 and 36 as hereinbefore described bears S 2,00° chs. and the course of the line is therefore S 88° 31' E and the distance 77,50 chs. -
79,70	East on a retracement line bet. secs. 1 and 36 The cor. of Tps. 38 and 39 S. R 8 and 9 W. which is as above firmly set marked and situated as described by the surveyor general bears N. 1,00° chs. and the bearing of the line is therefore N 89° 17' E. and the distance 79,71 chs. -
	<p>In order to test the solar apparatus by comparing the indications resulting from solar observations made during a.m. and p.m. hours with a true meridian determined by observation on Polaris I proceed as follows. -</p> <p>Near my camp in sec. 31 Tp. 38 S. R 9 W. about 5.00 chs N. of the s. bdy. of sec. I examine the adjustments of the transit and correct the level and collimation errors there, I set off 37° 28' over the lat. arc 19° 23' S on the decl. arc and at 34 32^m p.m., 2 m^t November 18. 1898 determine a true meridian with the solar and mark a point thereof on a stake firmly set in the ground 5.00 chs. N. of my station. At 9^h 29^m p.m., I set off 37° 28' over the lat. arc 19° 23' S on the decl. arc and observe Polaris at upper culmination in accordance with Manual of Instruction and mark a point thereof on the stake previously set 5.00 chs N. of the instrument. -</p> <p style="text-align: right;">November 18. 1898</p>

Subdivision of T. 39 S. R. 9 W.

November 19, 1898. at 8⁴³0 a.m., out & set off $37^{\circ}28'W$
 on the lat. and $19^{\circ}32'S.$ on the decl. arc and
 mark the true meridian determined by the
 solar obs. the stakes set November 18. 6.00 hrs N.
 of my station, and was find the two meridians
 established by p.m. and a.m. observations of the
 solar to agree with the True meridian established
 by Polaris observation within $1'$ of arc respectively
 which is the least count of the horizontal limb
 of the transit; and therefor conclude the
 adjustments of the instrument are satisfactory

November 19, 1898

General Description

This township, in all mountainous land, is
 very rough and broken with an average elevation
 of about 7000 ft. above sea level. - The soil is
 in mainly hard and gravelly, but in places sandy
 while much is barren rock. -

A very small proportion of the township is
 suited for cultivation even could water for irrigation
 be obtained, but along North Fork in some small
 patches of bench and bottom land having excellent
 soil, of a sandy loam and very productive.
 The remainder furnishes fair summer pasture.
 There is but little timber of commercial value.
 Over the plateau, covering the N. half of the
 township is a scattering growth of large
 pine trees which bunch in places but not
 to any great extent. - The most extensive
 bunch being in sec. 8 south and west of the
 Sawyer mill and also in secs. 2-3-11 and 15.
 On the south half the timber consists mainly of
 scrubby cedar and pines..

Undoubtedly the township contains large and
 valuable coal deposits, as the upper Cretaceous
 gray sandstones form the surface rock and in
 turn covered to a large extent with the
 Tertiary shell and clay beds ranging from a few
 feet to nearly 100 ft in thickness; and many
 outcroppings of coal veins can be observed. -

Subdivision of T. 39 S. 18. 9 W., General Description

The whole township excepting secs. 13-24-26-27-28-29-30-31-32-33 and 34, is probably underlaid with coal, and I therefore term it as Coal Land. With the exception of the North Fork there is no water excepting a few very small springs and streams which mostly go dry in the fall and winter seasons. -

There are four permanent settlers in the township one each in secs. 11-13-14 and 34 the remaining cabins are used for summer range purposes only. Of the four above described settlers each cultivates a portion of their claim and raise grain of various kinds. -

Andrew P. Hanson
U.S. Deputy Surveyor

Final Oaths of Deputy Surveyor and his Assistants.

LIST OF NAMES.

A list of the names of the individuals employed by _____, United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of _____

showing the respective capacities in which they acted:

_____, Chainman.

_____, Chainman.

_____, Moundman.

_____, Moundman.

_____, Axman.

_____, Axman.

_____, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted _____, United States Deputy Surveyor, in surveying all those parts or portions of the _____

..... of the base
and meridian, of which are represented
in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor General for

_____, Chainman.

_____, Chainman.

_____, Moundman.

_____, Moundman.

_____, Axman.

_____, Axman.

_____, Flagman.

Subscribed and sworn to before me this _____
day of _____, 189 _____ }

SEAL

STATE OF UNITED STATES DEPUTY SURVEYOR

United States Deputy Surveyor

swearingly declare that, in pursuance of a contract received from

United States Surveyor General for

the day of 189, I have well, faithfully, and truly, in my proper power, and in strict conformity with the instructions furnished by the United States Surveyor General for the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of

and Maryland, in the of, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for the State of Maryland, and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey; and should any fraud be detected, I will suffer the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

United States Deputy Surveyor,

Subscribed by said _____, and sworn to before me this }

day of 189

2000
2000

APPROVAL.

Office of the United States Surveyor General,

Washington, D.C., May 5th 1900.

The foregoing field notes of the survey of the Subdivisions of Township
Agricultural Range of West of the Lathalton River & Riverhead
Md.

examined by,

Asst. Surveyor
under his contract No. 220, dated April 1st, 1895, having been
critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Jacob B. Clark
United States Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in the State of Maryland, has been correctly copied from the original notes on file in this office.

United States Surveyor General.

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BOOK A-256

FIELD NOTES

OF THE SURVEY OF

Subdivision Lines

of

Township N^E 38 South Range N^E 10 West

Of the Salt Lake Base and Meridian,

Utah

AS SURVEYED BY

Andrew P. Hanson, United States Deputy Surveyor,

Under his Contract No. 220, dated April 1, 1898

Survey commenced November 19, 1898

Survey completed November 20, 1898

Sub-Sight m. ch. etc. -
5-01-14 ✓

F
Sect. 325-10 W -

High
Moundmen
1-00-00 ✓
1-00-28 ✓
1-00-22 ✓
1-00-40 ✓
1-00-26 ✓

5-01-14 ✓

Subscribed and sworn to before me this _____ }
day of _____, 189 }
 }

○○○○○
○ SEAL ○
○○○○○

WE, _____ and _____
do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of _____

_____, Moundman

_____, Moundman

Subscribed and sworn to before me this _____ }
day of _____, 189 }
 }

○○○○○
○ SEAL ○
○○○○○

WE, _____ and _____
do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey of _____

_____, Axman

_____, Axman

Subscribed and sworn to before me this _____ }
day of _____, 189 }
 }

○○○○○
○ SEAL ○
○○○○○

I, _____, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of _____

_____, Flagman

Subscribed and sworn to before me this _____ }
day of _____, 189 }
 }

○○○○○
○ SEAL ○
○○○○○

Subdivision of T. 38 S R 10 W.

chains.	<p>Survey commenced November 19, 1898 and executed with a Gurley light mountain transit with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other reading to single minute of arc which is also the least count of the vernier of the latitude and declination arcs.</p> <p>The instrument was examined tested on the true meridian at Salt Lake found correct and was approved by the Surveyor General for Utah August 23, 1898.</p> <p>For Polaris observations, and test of solar apertures completed this day second of field notes of Subdivision of T. 38 S R. 10 W. reference to which is hereby made. - see LTR "C".</p> <p>At the cor. of secs. 2-3-34 and 35 on S. bdy. of Th. 38 S R. 10 W. latitude $37^{\circ}28'$ N. longitude $112^{\circ}55'$ W. ab. 2440 ft m, 2 mt. I. set off $37^{\circ}28'$ on the lat. arc $19^{\circ}36'$ " S. on the decl. arc and determine a true meridian with the solar. The magnetic bearing of the true meridian thus determined, at 2410 m p.m. is N. $15^{\circ}30'$ W. the angle thus determined reduced by the table page 100 gives the mean mag. decl. $15^{\circ}33'$ E. -</p>
4,000	<p>Furnish the cor. of sec. 2-3-34 and 35 as above described which is a stone firmly set marked and witnessed as described by the Surveyor General I run N. $0^{\circ}1'$ W. on a random line bet. secs. 34 and 35 Reb. limb. 14 sec. cor.</p>
8,000	<p>Intersect E. and W. line 18 lks. E. of cor. of sec. 26-27-34 and 35 which is a stone firmly set marked and witnessed as described by the Surveyor general. Thence I run S. $0^{\circ}9'$ E. on a true line bet. secs. 34 and 35. On mountainous land Ascending on broken N.E. slope in scattering timber Top of slope and spurs S.E. Begin descent</p>

Subdivision of T. 38 S. R. 10 W.

chains	
8,90	Top of perpendicular sandstone break 150 ft deep bear N. 83° E. and S. 85° W.
9,04	Foot of break and beginning of steep descent in loose sand and boulders <u>Note:</u> The method employed in measuring over this vertical break as well as all others in this survey was to drop a weighted iron pin with flag from a flagpole 16 ft. long held horizontally over the edge of the break; if the break was sloping but too steep to measure in the ordinary way I used a tape 5 ft. long and calculated the slope angle. — I found this method accurate and more expeditious than triangulation it being in most cases very difficult to obtain a satisfactory base line. —
2,00	Descent becomes less steep, and soil hard, rocky and very broken
4,00	Set a sandstone 18 x 10 x 6 in. 12 in. in the ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on W. face; raised a mound of stones 2 ft. base 1 $\frac{1}{2}$ ft. high W. of cor. Site impracticable
6,00	Descending on lip of spur between two ravines
8,00	The cor. of secs. 2-3-34 and 35 This cor. stands 750 ft. below the cor. of secs. 26- 27-34 and 35
	Land mountainous very rugged Soil gravelly rocky and sandy tribute Timber: scrubby cedar and pinyon scattering Mountainous land 8,000 ch. —
	From the cor. of secs. 27-28-33 and 34 which is a line firmly set marked and witnessed as described by the Surveyor general I run East on a random line bet. secs. 27 and 34
4,00	Set line. $\frac{1}{4}$ sec. cor.
8,028	Intersect 4 and 8-line 12 chs. N. of cor. of secs 26-27- 34 and 35 as hereinbefore described Thence 0 river. N. 89° 5' 5" W. on a true line bet. secs. 27 and 34 On mountainous land Ascending on broken slope in scattering timber

Subdivision of T. 38 S. R. 10 W.

chain

5,0.0

Top of spur S. E. and beginning of descent on S. W. slope

31,30

Top of westward break 110 ft. deep. corner N. W. and S. E.

31,39

Foot of bank and beginning of steep descent in bed sand and large fragments of sandstone

37,00

Slope becomes less steep and soil hard, rocky and broken

38,60

Head of ravine draining S. 201 ft below foot of break
Begin ascent

40,14

Set w sandstone 28 x 11 x 5 in. 21 in. in the ground
for 14 sec. cor. marked 14 on N. face; raised a
round of stones 2 ft. base 1½ ft. high S. of cor.
Pit impracticable. —

46,10

Top of spur S. 150 ft above hollow

Begin descent on broken S. slope

80,28

The cor. of secs. 27-28-33 and 34

Thin cor. stands 350 ft. below the cor. of secs. 26-27-
34 and 35.

Land mountainous very rugged

Soil rocky, gravelly and sandy 4th break

Timber: scrubby cedar and piñon very scattering

Mountainous land 8028 chs. —

November 19, 1898

November 20. 1898: From the witness cor. to cor. of secs.
25-26-35 and 36 on line bet. secs. 35 and 36 at 72.25 chs.
40° 1' W from cor. of secs 1-2-35 and 36; being a stone
firmly set marked and witnessed as described by
the surveyor general 19 min

East on a random line bet. secs. 25 and 36

On offset line as follows: at foot of impassable break

East 10.00 chs.

North 3.00 chs.

East 8.00 chs.

North 2.75 chs. to the random line, on which at
set line 1/4 sec. cor.

40,00

Intersect E. bdy. of Tp. 23 chs. S. of cor. of secs
25-30-31 and 36, which is a stone firmly set
marked and witnessed as described by the
Surveyor general

Signed Drawn

Subdivision of T. 38 S. R. 10 W.

Chain	459°50' N. on a true line bet. sect. 25 and 36 On mountainous land
19.55	Descending steep bank 25°, in scattering timber Three creeks 20 ltrs wide course S. 20° W. in bottom of narrow channel, in box canyon, 220 ft below cor. Begin ascent on steep broken slope.
40.11	Bet a sandstone 18 x 10 x 6 in. 12 in. in the ground for 1/4 sec. cor. marked 1/4 on N. face; raised a mound of stones 2 ft. base 1½ ft. high N. of cor. Pit impracticable -
62.00	Foot of impassable rocky break bears N.E. and S.W. Bet a sandstone 24 x 9 x 7 in. 18 in. in the ground for witness cor. to cor. of secs 25-26-35 and 36 marked W.C. and N.W. face with 1 notch on S. and E. edges; raised a mound of stones 2 ft. base 1½ ft. high N. of cor. Pit impracticable This cor. stands 800 ft. above creek.
80.22	The cor. of secs 25-26-35 and 36 not alt. Land mountainous very rugged Soil rocky and gravelly 1/4 brak Timber: scrubby cedar and piñon and a few large pine, all very scattering Dense oak brush undergrowth - Mountainous land 80.22 chs. -
40.05	From the cor. of secs. 23-24-25 and 26 which is a stone firmly set marked and witnessed as described by the surveyor general On line S. 59°50' E. on a random line bet secs. 24 and 25 Bet 1/4 sec. cor.
80.40	On direct E. side of Th. 40 ltrs. S. of cor. of secs. 19-24- 25 and 30 which is a stone firmly set marked and witnessed as described by the surveyor general On line S. 59°53' E. 80.40 on true line bet secs. 24 and 25 On mountainous land
26.15	Descending on S. w. slope very broken and rocky in scattering timber in bottom of box canyon West Fork of Three Creek 11 ltrs. wide course S. 32° E in bottom of narrow channel 200 ft below cor. Begin ascent on very broken steep slope

Subdivision of T. 38 S. R. 10 W.

Chains	
40,20	At a sandstone 25' x 9 x 6 in. 19 in. in the ground for 14 sec cor. marked 14 on N. face; found which a cedar tree 6 in. diam. bears N 16° 20' W. 31 chs. dist. marked 14 S. 24 B.T.
	A cedar tree 6 in. diam. bears S 71° 18' E 44 chs. dist. marked 14 S 25' B.T.
53,70	Foot of perpendicular sandstone break 90 ft high courses N.W. and S. 25° E.
53,90	Top of break 620 ft above creek and beginning of broken ascent on plateau
70,30	Top of broken ascent 200 ft. above break and beginning of gradual ascent to
80,40	The cor. of secs. 23-24-25 and 26 Land mountainous very rugged soil rocky and gravelly 4th rate Timber; scrubby cedar and pinyon and a few large pine - all scattering Dense oak brush undergrowth - Mountainous land 80,40 chs. -
	Note: The sky being overcast during the noon hours I could not observe the sun on the meridian this day. - November 20, 1898

40,00	At the cor. of secs. 13-14-23 and 24 which is a stone firmly set marked and witnessed as described by the surveyor general; at 34 12 m p.m. on November 20. I set off 37° 31' N. on the lat. and 19° 5' S. on the decl. and determined a true meridian with the sextant, thence I run N 89° 5' E on a random line bet. secs 13 and 24 Set limb. 114 sec. cor.
80,24	I intersect E. bdy. of Tp. 14 chs S. of cor. of secs 13-18-19 and 24 which is a stone firmly set marked and witnessed as described by the surveyor general Thence I run N 89° 47' W on a tree line bet. sec. 13 and 24 On mountainous land Ascending steep broken slope in bottom of cañon In scattering timber and oak brush

Subdivision of T. 38 S. R. 10 W.

BOOK NO. 200

chain	N 89° 30' W. on a true line bet. secs. 25 and 36 On mountainous land Descending steep broken slope, in scattering timber Three creeks 20 ltrs wide course S. 20° W in bottom of narrow channel, in box canyon, 220 ft below cor. Begin ascent on steep broken slope.
19,55	Set at sandstone 18 x 10 x 6 in. 12 in. in the ground for 1/4 sec. cor. marked 1/4 on N. face; raised a mound of stones 2 ft. base 1 1/2 ft. high N. of cor. Pit impracticable. -
40,11	Foot of impassable rocky break bed N. E. and S. W. Set at sandstone 24 x 9 x 7 in. 18 in. in the ground for witness cor. to cor. of secs 25-26-35 and 36 marked 1/4 C. on N.W. face with 1 notch on S. and E. edges; raised a mound of stones 2 ft. base 1 1/2 ft. high N. of cor. Pit impracticable This cor. stands 800 ft. above creek.
80,22	The cor. of secs 25-26-35 and 36 not all. Land mountainous very rugged Soil rocky and gravelly with sparse Timber: scrubby cedar and piñon and a few large pine, all very scattering Sparse oak brush undergrowth - Mountainous land 80,22 chs. -
4,00	From the cor. of secs. 23-24-25 and 26 which is a stone firmly set marked and witnessed as described by the surveyor general I run S. 89° 30' E. on a random line bet. secs. 24 and 25 Set limb 1/4 sec. cor.
80,40	Untersect E. bdy. of Tp. 40 ltrs. S. of cor. of sect. 19-24- 25 and 30 which is a stone firmly set marked and witnessed as described by the surveyor general Hence I run S. 89° 53' W. thro a true line bet. secs. 24 and 25 On mountainous land Descending on S. W. slope very broken and rocky In scattering timber in bottom of box canyon West Fork of Three Creek 11 ltrs. wide course S. 32° E in bottom of narrow channel 200 ft below cor. Begin ascent on very broken steep slope
26,15	

Subdivision of T. 38 S. R. 10 W.

Chain

40.20

At a condstone 25 x 9 x 6 in., 19 in. in the ground
for 1/4 sec cor. marked 1/4 on N face; found which
a cedar tree 6 in. diam. bears N 16° 20' W. 31 clks.
dist. marked 1/4 S. 24 B.T.

A cedar tree 6 in. diam. bears S 71° 18' E 44 clks.
dist. marked 1/4 S 25 B.T.

53.50

Foot of peak perpendicular condstone break 90 ft high
covered N. 33 and S. 25 + E

53.70

Top of break 620 ft above creek and beginning
of broken ascent on plateau

70.50

Top of broken ascent 207 ft above break and
beginning of gradual ascent to

50.40

Top of cor. of secs. 23-24-25 and 26

Land mountainous very rugged

Soil rocky and gravelly 46 in. to

Timber; scrubby cedar and pines and a

few large pines - all scattering

Dense oak brush underneath -

Mountainous land 80,40 clks. -

Note! The day being overcast during the noon
hours I could not observe the sun on the
meridian this day. - December 20, 1878

At the cor. of secs. 13-14-23 and 24 which is a
stone firmly set marked and witnessed as
described by the surveyor general; at 3412 m
P. M. 1 m 7 fms 20. I set off S 7° 31' N. and
the lat. and 19° 5' S. on the decl. and determined
a true meridian with the solar, thence I run
S 89° 5' 3" E on a narrow line bet. secs 13 and 24

40.50

Set limf. 1/4 sec. cor.

80.24

Intercept E. bdy. of Tp. 14 less S. of cor. of sec.
13-18-19 and 24 which is a stone firmly
set marked and witnessed as described by
the surveyor general.

Thence I run

S 89° 47' W on a tree line bet. secs 13 and 24

On mountainous land

Ascending steep broken slope in bottom of cañon
In scattering timber, and oak brush.

Subdivision of T. 38 S R 10 W.

Chain	
7,60	Top of perpendicular sandstone break course N and S. 90 ft. high
7,75	Top of break and beginning of steep broken ascent
12,00	Top of steep ascent about 350 ft. above cor. and beginning of gradual ascent on rolling plateau
19,00	Top of spur N. 1 chain on broken N. E. slope
40,72	Set a sandstone 24 x 9 x 6 ins. 12 ins. in the ground for 14 sec. cor. marked 14 and S. face raised as mound of stones 2 ft. base 1½ ft. high N. of cor. Pits impracticable
41,50	Enter shallow wash from west turns N 60° E
50,70	An old broken coral 2 cm equino bears S. 1. chain Leaves wash near its head
52,00	
67,45	Top of ridge 750 ft. above cor. of sec. curved N and S. Descending W.
80,24	The cor. of secs. 13-14-23 and 24 Land mountainous broken and rugged Soil gravelly and rocky 3rd and 4th ratio Timber: aspen and cedar of small size and scattering. - Dense aspen brake, oak and cherry brush Mountainous land 80,24 chs. - Note: On account of cold weather, frozen ground and snow it is becoming impracticable to continue work in the field, and with the completion of this township I conclude to "lie up" for the winter. -

November 20, 1898.

General Description

The portion of this township covered by the present survey is all mountainous land exceedingly broken and rugged. -

There are no permanent settlers and the land is valuable for summer grazing only as far as concerns agriculture. -

The entire area is probably underlaid with valuable coal deposits and all of it as well as the

Subdivision of T 38 S R 10 W., General Description

remained; the tract will be designated
Coal Land, and is return as such.
The tract is watered by Pine Creek and
the bottom which traverse a deep box canon
is very hard to reach and therefore of small value.
There is but little timber of commercial value
within this area.

Andrew C. Hansen
U.S. Surveyor

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Final Oaths of Deputy Surveyor and his Assistants.

LIST OF NAMES.

A list of the names of the individuals employed by _____

, United States Deputy Surveyor, to assist in running, measuring, and

marking the lines and corners described in the foregoing field notes of the survey of _____

showing the respective capacities in which they acted:

_____, Chainman.

_____, Chainman.

_____, Moundman.

_____, Moundman.

_____, Axman.

_____, Axman.

_____, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted _____

, United States Deputy Surveyor, in surveying all

those parts or portions of the _____

of the _____ base

and _____ meridian, _____ of _____, which are represented

in the foregoing field notes as having been surveyed by him and under his direction; and that said survey
as been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the
corner monuments established, according to the instructions furnished by the United States Surveyor
General for _____

_____, Chainman.

_____, Chainman.

_____, Moundman.

_____, Moundman.

_____, Axman.

_____, Axman.

_____, Flagman.

Subscribed and sworn to before me this _____

day of _____, 189 _____



STANISLAUS CO., CALIFORNIA.

STATE OF UNITED STATES SURVEYOR.

United States Deputy Surveyor.

I solemnly swear that, in pursuance of a contract received from
Edward Steele Surveyor General, the

day of _____, 189_____, I have well, faithfully, and truly, in my
proper person, and in strict conformity with the instructions furnished by the United States Surveyor
General for _____, the Manual of Surveying Instructions, and the laws of
United States, surveyed all those parts or portions of _____

of the _____

and _____ township, in the _____ of _____, which are represented in the
foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly
swear that all the corners of said survey have been established and perpetuated in strict accordance with the
Manual of Surveying Instructions, and the special written instructions of the United States Surveyor
General for _____, and in the specific manner described in the field notes, and that
the foregoing are the original field notes of such survey; and should any fraud be detected, I will suffer
the penalty of perjury under the provisions of an Act of Congress approved August 8, 1840.

Andrew P. Hansen
United States Deputy Surveyor.

Subscribed by said _____, and sworn to before me this }

day of _____, 189_____. }

600000
611111
600000

APPROVAL.

Office of the United States Surveyor General,

John R. Clegg, May 5th 1890

The foregoing field notes of the survey of _____, the boundaries of Township
S. 30, Range 10, West of the Fall Date River and
Mountain Creek, _____.

Subscribed by _____

under his contract No. 2320, dated _____, April 1st, 1890, having been
critically examined, and the necessary corrections and explanations made, the said field notes, and the
margin there opposite, are hereby approved.

Jacob H. Blodard
United States Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described survey in
has been correctly copied from the original notes on file in this office.

United States Surveyor General.

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BOOK A-256

FIELD NOTES

OF THE SURVEY OF

*Souther Boundary**of**Township N^E. 39 South Range N^C. 10 West*

Of the Salt Lake Base and Meridian,

Utah

AS SURVEYED BY

*Andrew P. Hammond, United States Deputy Surveyor,**under his Contract No. 220, dated April 1, 1898**Survey commenced May 5, 1898**Survey completed May 7, 1898*

6-151

*S. Poling high m. obs 165 - 7-39-92 ✓**closing - 1-62-65 ✓*

Names and Duties of Assistants.

Henry E. Gire - Chairman

Thomas E. Lewis - " "

Henry E. Gire - Vice-Chairman

Joseph Bryant - " "

Joseph Bryant - - - - - Assistant

Edward H. Parry - - - - "

Edward H. Parry - Flagman

John Gardell - - - - - Assistant

John Gardell - - - - - Flagman

The following official of Geis Lye & Gardell see book B

BOOK A-256

INDEX DIAGRAM.

Township _____, Range _____

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

Meanders Page _____

Preliminary Oaths of Assistants.

WE, *Joseph Bryant* and *John C. Williams*, do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of *the circuit of Salt Lake City*.

Chainman.

Chainman.

Subscribed and sworn to before me this _____
day of _____, 1899 }



WE, *Joseph Bryant* and
do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of *S. Edge of T. 39 S. R. 10 W. and N. Edge of T. 39 S. R. 11 W. and S. W. and N. Edge of T. 38 S. R. 11 W. Salt Lake City and vicinity*.
John A. Bryant, Moundman.
John A. Bryant, Moundman.

Subscribed and sworn to before me this *3rd*
day of *May*, 1899 }



MY COMMISSION EXPIRES

DEC. 17th, 1901.

WE, *Joseph Bryant* and *Edward H. Parry*
do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey of *The South Edge of T. 39 S. R. 10 W. and N. Edge of T. 39 S. R. 11 W. and S. W. and N. Edge of T. 38 S. R. 11 W. Salt Lake City and vicinity*.
Joseph Bryant, Axman.
Edward H. Parry, Axman.

Subscribed and sworn to before me this *3rd*
day of *May*, 1899 }



MY COMMISSION EXPIRES

DEC. 17th, 1901.

I, *Edward H. Parry*, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of *S. Edge of T. 39 S. R. 10 W. and N. Edge of T. 39 S. R. 11 W. and S. W. and N. Edge of T. 38 S. R. 11 W. Salt Lake City and vicinity*.
Edward H. Parry, Flagman.

Subscribed and sworn to before me this *3rd*
day of *May*, 1899 }



MY COMMISSION EXPIRES

DEC. 17th, 1901.

Mayhew H. Galley
Notary Public

South Boundary of T 39 S R 10 W

chains

Survey commenced May 5: 1899 and concluded with a Gurley light mountain transit with solar attachment. - The horizontal limb is provided with two double verniers placed opposite to each other and reading to single minutes of arc which is also the least count of the verniers of the latitude and declination arcs.

The instrument was examined, tested on the true meridian at Salt Lake, found correct and was approved by the surveyor general for Utah August 23, 1898. -

I examined the adjustments of the transit and correct the level and collimation errors, then to test the solar apparatus by comparing its indications resulting from a.m. and p.m. solar observations, with a true meridian determined by observations on Polaris I proceed as follows. -

May 5: At the cor. of Tps. 39 and 40 S. R^o 9 and 10 W. latitude $37^{\circ} 23' N$ longitude $112^{\circ} 5' W$ at $4^{\text{h}} 55^{\text{m}} p.m.$, 7 mt. I set off $37^{\circ} 23'$ on the lat. and $16^{\circ} 26'$ N. on the decl. and determine with the solar a true meridian and mark a point thereof on a stake firmly set in the ground 4.50 chs. S. of the cor. (Note: the meridian is marked S. by reversing the telescope as the line could be measured over stake set N. on account of curv. -)

At $10^{\text{h}} 2^{\text{m}} p.m.$, 7 mt I observe Polaris at upper culmination in accordance with manual of instructions and mark a point in the true meridian thus determined on the stake previously set 4.50 chs. S. of my station

May 5: 1899

May 6. 1899: at $4^{\text{h}} 30^{\text{m}} a.m.$, 7 mt I set off $37^{\circ} 23'$ N. on the lat. and $16^{\circ} 36'$ N. on the decl. and mark a point in the true meridian determined by the solar on the stake set May 5: at 4.50 chs. S. of the cor.: when by inspection I learn that the meridians established by p.m.

South Boundary of T 39 S R 10 W

	<p>chain and a.m. solar observations respectively agree within 1' of arc with the true meridians established by observation on Polaris and therefore conclude the adjustments of the transit are satisfactory.</p> <p>The magnetic bearing of the true meridians at 7⁴³0 m a.m. is N. 15° 35' W.; the angle thus determined reduced by the table page 100 gives the mean mag decl. 15° 31' E.-</p>
	<p>I begin at the cor. of Tps 39 and 40 S R 9 and 10 W which I established November 1. 1898</p> <p>Then I run</p> <p>West bet. sec. 1 and 36</p> <p>On mountainous land</p> <p>In timber over rough rocky surface</p> <p>The perpendicular bank of North Fork Canon 400 ft deep on course S 85° W and N 85° E immediately west of the cor. and terminating at the bottom in a narrow tortuous gorge, makes chaining along the line impossible. Therefore I offset as follows:-</p> <p>North 7.88 chrs. is a point determined by me November 1. 1898 in the survey of W. bdy. of T. 39 S. R. 9 W. being the N. edge of canon</p> <p>Thence on offset line.</p> <p>West 40.00 chrs.</p> <p>South 4.00 chrs. is a point on edge of perpendicular bank in North Fork Canon course E. and W. at 3.88 chrs N. of</p>
4000	<p>The point $\frac{1}{4}$ sec. cor. in canon</p> <p>Set at sandstone 18 x 10 x 6 in. 12 in. in the ground for witness cor. to $\frac{1}{4}$ sec. cor. marked N. C 44 ft 0 in. N. face raised a mound of stones 2 ft base 1$\frac{1}{2}$ ft high N. of cor.-</p> <p>Pit impracticable</p> <p>Thence on offset line</p> <p>West 36.50 chrs.</p>
7650	<p>South 3.68 chrs. to sec. line bet sec 1 and 36 at E. top of north side of canon course E. and S. 85° W</p>

South Boundary of T. 39 S 12 W

chain 8,000	Begin ascent on S. slope w. Set a sandstone 18' x 10' x 9 in. 12 in. in the ground for cor. of sects. 1-2-35 and 36 marked with 1 notch on E. and 5 notches on W. edges from which A cedar tree 7 in diam. bears N 18° 50' E 43 degs. dist marked T. 39 S 12 W 5 36 B.T. A cedar tree 9 in. diam bears N 56° 31' W 67 degs. dist marked T 39 S R 12 W 5 36 B.T. No other trees within limit: raised a mound of stones 2 ft. base 1½ ft. high N. of cor. Pits impracticable. — Land mountainous very broken soil rocky Timber: cedar and pinion above; pine below in bottoms of canons Mountainous land 8.00 chrs. —
8,000	West. bch. sect. 2 and 35 — On mountainous land On broken rocky S. slope along top of canon descending gradually In scattering timber Bottom of ravine 100 ft deep drains S to canon at 2.50 chrs.
4,000	Set a sandstone 18' x 9' x 7 in. 12 in. in the ground for 144. sector. marked 144 on N. face from which a cedar tree 11 in. diam. bears N 17° 3' W 35° degs. dist. marked 144 3 36 B.T.
5,415	A pinion tree 6 in. diam. bears S 74° 15' E 14 chrs. dist. marked 144 5.2 B.T.
5,415	Bottom of ravine 160 ft. deep drains S. Begin ascent w.
6,800	Top of spur 150 ft. high broken S. W. canon descending to
8,000	Set a sandstone 18' x 10' x 6 in. 12 in. in the ground for cor. of sects. 2-3-34 and 35 marked with 2 notches on E and 4 notches on W. edges; raised a mound of stones 2 ft. base 1½ ft. high N. of cor. Pits impracticable. — This cor. stands about 350 ft below the cor. of sec 1-2-35 and 36. —

South - Boundary of T 39 S R 10 W

chain	Land mountainous very broken soil rocky and gravelly; barren rock mainly Timber: scrubby cedar and pinion scattering Mountainous land 8,000 chs. -
750	West bet. sec. 3 and 34 On mountainous land Descending on rocky slope to Top of perpendicular sandstone break bears N. and S. 800 to 1000 ft. deep to bottom of cañon draining S. and further chaining is impossible: therefore At the cor. of sec. 2-3-34 and 35 as above described I set a flag and measure off a base line North- 8,000 chs. where I also establish a flag: thence I go to a point on top of break on W. side of cañon where flag at cor. of sec. 2-3-34 and 35 bears East.: and flag at N. end of base, bears N 47° 46' 30" E therefore chain. 42° 13' 30" X 8,000. or. $\frac{8000}{\tan 42^{\circ} 13' 30''} = 88,15 \text{ chs.}$ and as the flags can not be seen at any place on the hill east of this point I run East 48,15 chs. to
4000	Set a sandstone 18 x 9 x 7 in. 12 in. in the ground for 1/4 sec. cor. marked 1/4 on N. face: raised a mound of stones 2 ft. base 1 1/2 ft. high N. of cor. Pile impracticable - This cor. stands on E. slope which descends very steeply and rocky to the creek which is at about 27.00 chs.; when there is a steep and rocky ascent on N. slope to the foot of the perpendicular break. Note: The sky being overcast during the noon hour I could not observe the sun on the meridian Ascending on steep rocky and broken slope to Set a sandstone 27 x 10 x 6 in. 20 in. in the ground for cor. of sec. 3-4-33 and 34 marked with 3 notches on E and W. edges: raised a mound of stones 2 ft. base 1 1/2 ft. high N. of cor. Pile impracticable. -
- 8000	This cor. stands 800 ft. above the 1/4 sec cor. Land mountainous very rugged soil rocky. Timber a few fine cedar and pinion scattering

Book A-200

South Boundary of T. 39 S. R. 10 W.

Chain	Mountainous land 8,000 chrs. - May 6, 1899
	May 9, 1899 at 7 ⁴⁵ m a.m., I set off 37° 23' N on the lat. arc 16° 53' N. now the decl. arc and determine a true meridian with the Solar at the cor. of sec. 3 - 4 - 33 and 34 thence I run
	West bet. sec. 4 and 33
	On mountainous land
	Ascending on rocky steep slope
8,15.	Top of canon base N and S. about 1500 ft above creek
	Begin gradual ascent
18,00	Top of ridge 100 ft high bears N 15° W and S 15° E Begin descent
39,60	Top of nearly perpendicular break 400 ft. deep bears S and N. 30° W and further chaining is impossible Abt. a sandstone 30 x 9 x 4 in. 24 in. in a mound of stone 3 ft base 2 ft. high on rocky bottom for whence cor. to 1/4 sec. cor. which falls in the break and is not set, marked N.C. 1/4 on S. face from which
	A cedar tree 9 in. diam. bears S. 65° 15' E. 89 chrs. dist. marked N.C. 1/4 S. 4 B.T.
	A cedar tree 16 in. diam. bears N. 45° 17' W. 72 chrs. dist marked N.C. 1/4 S. 33 B.T.
	At this cor. I plant a flag and measure a base width 27.55 chrs where a flag is also placed: then I go to a point on top of break on W. side of creek whence the flag at the witness cor. bears East; and the flag at S. end of base bears N. 54° 58' E. therefore taking 35° 2' X 27.55 = 05 <u>27.55 chrs</u> tan. 35° 2' = 39.31 chrs + 39.60 = 78.91 chrs
78,91	Top of break 300 ft. deep on W. side of canon comes to 15° W and S. 15° E. -
	A stream about 6 chrs. wide flows S. in bottom of this canon about 21.00 chrs. E. and 900 ft below this point. -
	Begin steep ascent to -
8,000	Set a limestone 18 x 10 x 6 in. 12 in. in the ground

South Boundary of T. 39 S. R. 10 W.

	chain for cor. of sec. 4-5-32 and 33 marked with 4 notches on E. and 2 notches on W. edges: from which A fine tree 24 ins. diam. bears $515^{\circ} 45' W.$ 12 ft. high. dist. marked T. 39 S. R. 10 W. S. 31 B.T. No other trees within limit. Raised a mound of stones 2 ft. base 1½ ft. high N. of cor. This cor. stands at about the same elevation as the witness cor. to the 1/4 sec. cor. Land mountainous very rugged soil rocky and gravelly; mostly barren rock Timber: cedar juniper and pine scattering. Mountainous land 8000 ft. -
4,000	West bet. sec. 5 and 32 On mountainous land Ascending on N.E. slope in timber and dense brush Set at limestone 18×10×6 ins. 12 ins. in the ground for 1/4 sec. cor. marked "4 over N. face": raised a mound of stones 2 ft. base 1½ ft. high N. of cor. A cedar tree 10 ins. diam. bears $41025^{\circ} 45.5^{\circ} 5^{\circ}$ W. dist. marked 1/4 S. 32 B.T.
4,200	Top of ridge bears $460^{\circ} W$ and $5.60^{\circ} E.$ 400 ft. above sec. cor. Begin descent on W. slope
4,800	Bottom of ravine 100 ft. deep drains S. Ascending to
6,000	Top of spur 3. 150 ft. high and beginning of descent
74.74	Bottom of ravine 200 ft. below spur, course 6 Ascending to
8,000	Set at limestone 28×10×6 ins. 21 ins. in the ground for cor. of sec. 5-6-31 and 32 marked with 1 notch on W. and 5 notches on E. edges. from which A fine tree 36 ins. diam. bears $4.87^{\circ} 1^{\circ} W.$ 14 ft. dist. marked T. 39 S. R. 10 W. S. 31 B.T. A fine tree 5 ins. diam. bears $438^{\circ} 3^{\circ} E.$ 74 ft. dist. marked T. 39 S. R. 10 W. S. 32 B.T. No other trees within limit. Raised a mound of stones 2 ft. base 1½ ft. high N. of cor.

South Boundary of T. 39 S 15 W.

chains

Pili impracticable. —

Land mountainous very broken

Soil gravelly and sandy & shale

Timber pine of large size but few growths

Dense oak brush undergrowth

Mountainous land 8000 chs. —

May 7, 1899: At this cor. I set off 16° 56' N. on the decl. arc and at 114° 56' a.m., 7 m.t. observed the sun. on the meridian; the resulting lat. is 37° 23' N.

West sec. recd. 6 and 31

On mountainous land

Through timber and dense oak brush

Ascending to

100 Top of spur S. and beginning of descent on
S.W. slope to

8,700 Top of perpendicular sandstone break 300 ft.
deep bears N.W. and S.E.

12,400 Stream 30 ft. wide course S.E. in bottom of canon
430 ft deep

Ascend W.

16,650 Top of west side of canon and beginning of
ascent

40,000 Set a limestone 28 x 10 x 6 in. 24 in. in a
mound of shingle 3 ft. base 1½ ft. high on rocky
bottom for 1/4 sec. cor. marked '4 on N. face
from which

A fine piece 18 in. diam bears 574° 15' E. 92 dist.
dist. marked 114 S 6 B.T.

No other pieces within limit. —

Pili impracticable. —

Top of slope bears N. and S. and highest point on
line about 400 ft above sec cor.

Begin descent on rolling slope course N. and S.

Bottom of gulch 200 ft deep course S. 30° W

Ascending to

11,600 Top of spur S. 25° W 140 ft high

Descending to

12,600 Bottom of gulch 125 ft below spur course S.

Begin ascent

South Boundary of T. 39 S. R. 10 W.

chain							
154.00	Top of ridge bears stand 5 300 ft. above gulch						
156.75	Begins descent broken w. slope w-						
197.66	Dry wash and bottom of Bear Creek comes s. in narrow rocky gulch 800 ft. below tip of ridge						
	Begin ascent in black lava slide						
199.92	Intersect Kolob Guide meridian and n. bdy. of T.P. at 1 mile 62.65 chs. N. of the established cor. of T.P. 39 and 40 S. R. 10 and 11 W. which is a stone firmly set marked and witnessed as described by the surveyor general. - I obliterate all markings on said cor. pertaining to R. 10 W. and set a black lava rock 26 x 9 x 8 inc. 19 inc. in the ground for closing cor. of T.P. 39 and 40 S. R. 10 W. marked C.C. 10 W. on E. 39 S and N. and 40 S. on S. faces with 6 grooves on N. S. and E. faces; from which						
	An oak tree 4 in. diam. bears N 1° 10' E 3,000 ft. dist. marked T 39 S 17 10 W S 31 13. T.						
	No other trees within limit;						
	Raised a mound of stones 2 ft base 1½ ft. high E. of cor. Pili impracticable. -						
	This cor. stands in lava slide 50 ft above bottom of gulch. -						
	Land mountainous very rugged soil gravelly and rocky & brittle Timber: large pine trees very scattering Dense oak brush undergrowth -						
	Mountainous land on 199.92 chs						

May 7. 1898

Boundaries of T. 39 S. R. 10 W.

Latitude deflections and closing errors

Line Designated	True bearing	Distance	Latitude		Departure	
			N	S	E	W
Kolob Guide line	North	477.00	477.00	1		
North Boundary	East	599.85			599.85	1
East "	South	479.28	1	479.28		
South "	West	599.92				599.92
Convergence					0.69	
Total		477.00	479.28	600.54	599.92	
		477.00		599.92		
Errors of Lat. and Long.				2.28	-0.62	

South Boundary of T. 39 S. 17 10 W.

General Description

This township in all respects appears land very rough and broken, and only a few acres within its boundaries are level enough to be cultivated. - There are some streams traversing the township but they are all found in deep box canons and very difficult to get at. - The soil is gravelly and rocky and there is little timber of commercial value and mostly inaccessible.

Andrew O'Sullivan
U.S. Dep. Surveyor

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Final Oaths of Deputy Surveyor and his Assistants.

LIST OF NAMES.

A list of the names of the individuals employed by _____, United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of _____ showing the respective capacities in which they acted:

, Chainman.

, Chainman.

, Moundman.

, Moundman.

, Axman.

, Axman.

, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted _____, United States Deputy Surveyor, in surveying all those parts or portions of the _____ of the _____ base and _____ meridian, _____ of _____, which are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor General for _____.

, Chainman.

, Chainman.

, Moundman.

, Moundman.

, Axman.

, Axman.

, Flagman.

Subscribed and sworn to before me this _____

day of _____, 180_____

SEAL

BLANC

Final Oath of United States Deputy Surveyor.

I, _____, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from _____, United States Surveyor General for _____, bearing date of the _____ day of _____, 189_____, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for _____, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of _____

of the _____ bas and _____ meridian, in the _____ of _____, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for _____ and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey; and should any fraud be detected, I will suffer the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

United States Deputy Surveyor.

Subscribed by said _____, and sworn to before me this _____
day of _____, 189_____ }



APPROVAL.

Office of the United States Surveyor General,

Dakota City, Dak May 5th 1900, 1800

The foregoing field notes of the survey of *The North Boundary of Township
39 South Range 10 West of the Dakota Base Meridian
Dakota*

executed by _____

under his contract No. 220, dated April 1st, 1898, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Jacob B. Bla
United States Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in _____, has been correctly copied from the original notes on file in this office.

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Examined

4-679.

70
J.C.P.

BOOK A-256

FIELD NOTES

OF THE SURVEY OF

Subdivision Lines

and

Resurvey of West Boundary

of

Township No 39 South - Range No 10 West

Of the Salt Lake Base and Meridian,

Utah

AS SURVEYED BY

Andrew P. Hamond, United States Deputy Surveyor,

Under his Contract No. 220, dated April 1, 1898

Survey commenced May 8th, 1898

Survey completed May 25th, 1898

6-151

Sat. high 27. Oct. 11th -
" closings 67-35-16 ✓
" " 1-03-40 ✓

Re Survey Kohl & C. M. high 5-79-58 ✓
" " 50th 395.11th high 5.00 ✓

Names and Duties of Assistants.

Henry E. Giese - - - Claimants

Thomas E. Lyons - - - "

Henry E. Giese - - - Merchandise

Joseph Bryant " "

Joseph Bryant - - - Appraiser

Edward H. Barry - - - "

Edward H. Barry - - - Flagman

John Gardell - - - Appraiser "

In affidavits (preliminary) of Mr. Giese, T. E. Lyons, see book "C."
H. J. Gardell

BOOK A-256

INDEX DIAGRAM.

Township _____, *Range* _____

6	5	4	3	2	1
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30	29	28	27	26	25
31	32	33	34	35	36

Meanders Page _____

Preliminary Oaths of Assistants.

We and do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of the

, Chainman

, Chainman

Subscribed and sworn to before me this
day of , 189 }

000000
000000

We, Joseph Bryant and do solemnly swear that I will well and truly perform the duties of moundman in the establishment of corners, according to the instructions given us, to the best of my skill and ability, in the survey of the subdivision line and survey of the body of T.P. 39 S. R. 10 W. Subdivision of T.P. 39 S. R. 11 W. and T.P. 38 S. R. 11 W. Salt Lake City and vicinity Joseph Bryant, Moundman

, Moundman

Subscribed and sworn to before me this 3rd
day of May , 189 }

000000
000000 MY COMMISSION EXPIRES
DEC. 17th. 1901.

Mayhew H. Galley
Notary Public

We, Joseph Bryant and Edward H. Parry do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey of the subdivision line and survey of the body of T.P. 39 S. R. 10 W. Subdivision of T.P. 39 S. R. 11 W. and T.P. 38 S. R. 11 W. Salt Lake City and vicinity Joseph Bryant, Axman Edward H. Parry, Axman

Subscribed and sworn to before me this 3rd
day of May , 189 }

000000
000000 MY COMMISSION EXPIRES
DEC. 17th. 1901.

Mayhew H. Galley
Notary Public

I, Edward H. Parry do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of the subdivision line and survey of the body of T.P. 39 S. R. 10 W. Subdivision of T.P. 39 S. R. 11 W. and T.P. 38 S. R. 11 W. Salt Lake City and vicinity Edward H. Parry, Flagman

Subscribed and sworn to before me this 3rd
day of May , 189 }

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MY COMMISSION EXPIRES
DEC. 17th. 1901.

Mayhew H. Galley
Notary Public

Subdivision of T 39 S 1110 W

chain	<p>Survey commenced May 5, 1899 and completed with a Gurley light mountain transit with solar attachment:- The horizontal limb is provided with two double verniers placed opposite to each other reading to single minutes of arc, which is also the least count of the verniers of the latitude and declination arcs. -</p> <p>The instrument was examined, tested on the true meridians at Salt Lake, found correct and was approved by the surveyor general for Utah August 23, 1898. -</p> <p>Having tested the instrument fully on May 6, 1899 at the beginning of the survey of S. 6th of this Tp. reference to which is hereby made and being confident it still remains in proper adjustment. - I consider it unnecessary to repeat the test at this time. - See book "G".</p> <p>I began at the cor. of secs. 1-2-35 and 36 on S. 6th of Tp. 39 S 1110 W. which I established May 6, 1899. Thence I went</p> <p>40° 1' W. bet sec. 35 and 36</p> <p>On mountainous land</p> <p>Ascending gradually on broken slope in timber</p>
25.15	Top of spur S.W. 205 ft. above cor. and beginning of descent to
35.50	Bottom of gulch 100 ft. deep course S. 20° W. from S.
40.00	Begin ascent in bottom of gulch Set a sandstone 18 x 9 x 6 in. 12 in. in the ground for 1/4 sec. cor. marked 1/4 on W. face; from which A cedar tree 7 in. diam. bears N 33° 40' W. 27 lbs. dist. marked 1/4 8.35 B.T. A juniper tree 11 in. diam. bears N 76° 15' E 56 lbs. dist. marked 1/4 8.36 B.T.
50.00	Gulch divides and turns N 25° W and N 30° E Begin ascent on spurs to
75.25	Top of spur about 450 ft above sec. cor.
80.00	Set a sandstone 18 x 7 x 6 in. 12 in. in the ground for cor. of secs 25-26-35 and 36 marked with 1 notch on S. and E. edges; from which A pine tree 15 in. diam. bears N 29° 0' E. 59 lbs.

Subdivision of T 39 S R 10 W.

chain	<p>dist. marked T 39 S 12 10 W. S 26° B.T. A cedar tree 8 in. diam. bears S 39° E 90 ft. N. dist. marked T 39 S 12 10 W. S 36 B.T. A pine tree 16 in. diam. bears S 64° 57' W. 100 ft. N. dist. marked T 39 S R 10 W. S 35 B.T. A pine tree 15 in. diam. bears N. 42° 55' W. 176 ft. N. dist. marked T 39 S R 10 W S 26 B.T. Land mountainous broken and rolling Soil, sandy rocky and gravelly 40 ft. thick Timber, pine, cedar and firs of good size Mountainous land 80,000 acres.</p>
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May 8, 1899: At 9⁴ 35^m a.m. I mt. I set off 37°
 24' N. Now the lat. are 17° 10' N. on the decl. and
 determine a true meridian with the
 polar at the cor. of sec. 25-26-35 and 36, thence
 I run

East on a random line bet. sec. 25 and 36
 Set comp. 1/4 sec. cor.

Intersect E. bdy. of Tp at cor. of sec. 25-30-31
 and 36

Thence I run

West on a line bet. sec. 25 and 36

On mountainous land

Ascending gradually in dense undergrowth

Top of ridge bears N 15° E and S 15° W 55 ft. above cor.
 Begin descent on broken slope

Bottom of gulch 300 ft below ridge drains S.
 Ascending to

Top of ridge bears N.E. and S.W. 150 ft high
 Descending to

Set a sandstone 18 x 11 x 6 in. 12 in. in the
 ground for 1/4 sec. cor. marked 4400 ft. fall;
 raised a mound of stones 2 ft. base 15 ft. high at
 of cor. Pits impracticable. -

Bottom of gulch 250 ft. below ridge drains S.
 Enter timber coarse N. and S. and ascend

Top of slope and beginning of rolling surface.
 Bottom of ravine 25 ft. deep drains S

Ascending gradually to

The cor. of sec. 25-26-35 and 36

Subdivision of T. 39 S. 12.10 W.

chain.	<p>Land mountainous broken and rolling soil gravelly and sandy 3rd rate Timber: pine of good size Mountainous land 8,000 chs. -</p> <p>The sky being over cast during the two hours I could not observe the sun on the meridian this day: May 8, 1899. -</p>
	<p>N. 0° 1' W. bet. secs. 25 and 26</p> <p>On mountainous land</p> <p>On pine timber.</p>
= 100	Began descent on S. slope.
4,30	Bottom of ravine 60 ft. deep. course S.W.
36.20	Began ascend on steep broken slope Top of and spur S.W. 450 ft above cor. Thence on gradual ascent and rolling S.W. slope Leave timber course E. and W.
40,00	Set at sandstone 18x10x9 ins. 12 ins in the ground for 1/4 sec. cor. marked 1/4 on W. face: raised a mound of stones 2 ft. base 1 1/2 ft. high W. of cor. - Pits impracticable
8,000	Set at Sandstone 18x8x6 ins. 12 ins in the ground for cor. of secs. 23-24-25 and 26 marked with 2 notches on S. and 1 notch on E. edges: raised a mound of stones 2 ft base 1 1/2 ft. high N. of cor. Pits impracticable This cor. stands 620 ft. above the cor. of secs. 25- 26-35 and 36
	<p>Land mountainous broken and rugged soil gravelly and rocky 4th rate Timber cedar pines and pine Mountainous land 8,000 chs. -</p>
4,000	East on a random line bet. secs. 24 and 25 Set limb. 1/4 sec. cor.
8,000	Intersect E. bdy. of Th. 14 chs S of cor. of secs. 19. 24-25 and 30. Thence SSW.
	<p>S. 89° 5' 4" W. on a tree line bet. secs. 24 and 25 On mountainous land Ascending in timber</p>

Subdivision of T. 39 S. R. 10 W.

chain

- 4,00 Top of spur S. and beginning of descent
Bottom of draw 150 ft below spur drains S.
Ascending and leave timber covered N. and S.
Set a sandstone 24 x 10 86 in. 18 in. in the
ground for 1/4 sec. cor. marked 1/4 on N. face,
raised a mound of stones 2 ft. base 1 1/2 ft. high
N. of cor. Pits impracticable
- 46.50 Top of ridge bears S 35° W. and N. 35° E 300 ft.
above draw
Begin descent on broken slope
- 51.27 Bottom of gulch 120 ft. deep covers S 15° E
Ascending to
- 60.40 Top of ridge & bears N. and S.: and beginning
of descent on rolling slope to
- 80.00 The cor. of secs. 23-24-25 and 26
This cor. stands 500 ft. below the cor. on E. edge of the
Land mountainous broken and rolling
Soil gravelly 3rd rate
Timber: scrubby cedar and pinion
Mountainous land 80.00 chs. -

May 8, 1899

- May 9, 1899: at 7:430 a.m., 2 m^t I set off 37°
24' 30". Now the lat. are 17° 26': N. or the decl.
are and determine a true meridian with the
solar at the cor. of secs. 23-24-25 and 26
Thence 0 run
N. 0° 1' W. bet. secs. 23 and 24
On mountainous land
On broken W. slope descending gradually
Head of ravine drains W.
Bottom of ravine 200 ft. deep drains W.
Ascending to
- 85.00 Top of spur W. 180 ft. above ravine
Descending gradually on broken surface
and N. W. slope
- 90.00 Set a sandstone 15 x 9 x 7 in. 12 in. in the
ground for 1/4 sec. cor. marked 1/4 on W. face,
raised a mound of stones 2 ft. base 1 1/2 ft. high
N. of cor. Pits impracticable

Subdivision of T 39 S.R 10 W

chain

80.00

Set a black lava stone 18x10x7 in. 12 in. in
the ground for cor. of sect. 13-14-23 and 24
marked with 3 notches on S. and 1 notch
on E. edges & raised a mound of stones 2 ft.
base 1 $\frac{1}{2}$ ft. high N. of cor. - Pitt impracticable
This cor. stands 480 ft. below the cor. of sects.
23-24-25 and 26

Land mountainous broken and rolling
soil gravelly and rocky 4 $\frac{1}{2}$ rd rate
No timber
Mountainous land 80.00 cts. -

40.00

N 89° 54' E on a random line bet. sects. 13 and 24
Set Lins. $\frac{1}{4}$ sec. cor.

79.90

Intersect Embly of Th. at cor. of sects. 13-18-19
and 24

Thence Grav.

S. 89° 54' W. over line line bet. sects. 13 and 24
On mountainous land

Descending on broken slope in dense oak brush
Bottom of ravine 50 ft. deep drains N. 20° W.

26.80

Bottom of ravine 60 ft. deep drains N. 20° W.

38.10

Set a Sandstone 24x9x6 in. 18 in. in the
ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on S. face,
raised a mound of stones 2 ft. base 1 $\frac{1}{2}$ ft.
high N. of cor. Pitt impracticable

79.90

The cor. of sects. 13-14-23 and 24

This cor. stands 830 ft. below the cor. of sects. 13-
18-19 and 24

Land mountainous steep broken slope
soil gravelly 3 $\frac{1}{2}$ rd rate -- No timber
Dense oak brush the whole distance
Mountainous land 79.90 cts. -

May 9: at this cor. I set off 17° 28' 00" S. on the
decl. are and at 114° 56' 24" m. 1 m. above the
sum. on the meridian, the resulting lat. is 37°
25' 30" N

A 0° 1' W. bet. sects. 13 and 14
On mountainous land

Subdivision of T. 39 S. R. 10 W.

chains 34,00	Descending in oak brush on rocky slope N.W. Begin abrupt descent course N. 80° W.
40,00	Set a Sandstone 18x10x6 in. 12 in. in the ground for 1/4 sec. cor. marked 1/4 on W. face from which A piñon tree 5 in. diam. bears N 10° 0' W. 15 lbs. dist. marked 1/4 S. 14 B.T.
43,70	No other trees within limit: raised a mound of stones 2 ft. base 1 1/2 ft. high W. of cor. Pith impractical Stream 3 lbs. wide in bottom of narrow ravine 400 ft deep course N. 80° W.
57,05	Begin ascent on steep slope Enter timber parallel with stream Top of spur W. 300 ft. high and beginning of descent
63,40	Bottom of narrow ravine 280 ft. deep course N. Begin ascent
71,00	Top of ravine 250 ft. high and beginning of gradual descent
75,80	Beginning of abrupt descent on N. slope
8,000	Set a black lava rock 24x9x6 in. 18 in. in the ground for cor. of sec. 11-12-13 and 14 marked with 4 notches on S and 1 notch on E edges; from which A cedar tree 5 in. diam. bears N 0° 20' W. 10 lbs. dist. marked T. 39 S 12 10 W S. 11 B.T. No other trees within limit: raised a mound of stones 2 ft. base 1 1/2 ft. high W. of cor. Pith impractical. Thin cor. stands in bottom of a ravine 135 ft. deep, draining W. Land mountainous very broken. Soil gravelly and rocky <u>3rd rate</u> . Timber: scrubby cedar scattering Mountainous land 80,000 acs. -
40,00	N 89° 5' 4" E on a random line bet. secs. 12 and 13 Set limb. 1/4 sec. cor.
80,14	Intersect E. bdy. of T.p. 15 lbs. N. of cor. of secs. 7- 12-13 and 14

Subdivision of T. 39 S. 19, 10 W.

chains	Glenwood Draw West on a line bet. secs. 12 and 13. On mountainous land Descending over rocky broken surface and dense oak brush.
4007	Set at black lava rock 1.8 x 10 x 6 in. 1.2 in. in the ground for 1/4 sec. cor. marked 1/4 on N. face: raised as mound of stones 2 ft. base 1 1/2 ft. high N. of cor. Pit impracticable Top of ravine bears N 80° W and S 80° E Begin abrupt broken descent over S.W. slope of ravine
70,20	Enter timber course parallel with ravine Bottom of ravine course N. 80° W
75,40	The cor. of secs. 11-12-13 and 14
80,14	This cor. stands 810 ft. below the cor. of secs. 7-12 13 and 18
	Land mountainous with broken slopes. Soil black lava rock and gravel + erratic. Timber: scrubby cedar scattering Mountainous land 80,14 clas.

	N 0° 11' W. bet. secs. 11 and 12
	On mountainous land
	In timber
0.21	Dry wash and bottom of ravine course N. 80° W. Begin steep broken ascent on S.W. slope
11,00	Top of spur N. 125° ft. above cor. Begin descent
24,95	Stream 4 lbs. wide course N. in bottom of narrow ravine 300 ft. deep. Ascending to
32,10	Top of spur S 55° W 150 ft. above stream and beginning of descent
4,000	Set at sandstone 24 x 10 x 6 in. 1.8 in. in the ground for 1/4 sec. cor. marked 1/4 on N. face: raised as mound of stones 2 ft. base 1 1/2 ft. high N. of cor. Pit impracticable.-
47,40	Three Creek a tributary of the Virgin River, 20 lbs. wide swift current course S. 20° W. in bottom of narrow rocky cañon 450 ft. below sec. cor.

Subdivision of T. 39 S. R. 10 E.

Chains	Begins ascent on cliff rocky, S.E. slopes
72.00	Top of cliff about C. 400 ft. above creek.
	Descending to
75.52	Bottom of ravine 200 ft. below spur. corrs. E.
	Begin ascent to
80.00	Set at sandstone 18 x 10 x 5 ins. 12 ins. in the ground for cor. of sec. 1-2-11 and 12 marked with 1 notch on E. and 5 notches on S. edges, from which
	A piñon tree 4 in. diam. bears N. 68° 8' E. 45 lbs. dist. marked T. 39 S. R. 10 W. S. 1 B.T.
	A cedar tree 7 in. diam. bears N. 46° 3' W. 61 lbs. dist. marked T. 39 S. R. 10 W. S. 2 B.T.
	A piñon tree 5 in. diam. bears S. 33° 5' W. 49 lbs. dist. marked T. 39 S. R. 10 W. S. 11 B.T.
	A cedar tree 6 in. diam. bears S. 70° 44' E. 49 lbs. dist. marked T. 39 S. R. 10 W. S. 12 B.T.
	Land mountainous very rugged.
	soil rocky and gravelly 4 th rate
	Timber: scrubby cedar and piñon scattering, and a fringe of large pine trees along creek
	Mountainous land 8700 elev. -
	May 9, 1899

	May 10 1899: On road
40.00	East on a random line bet. sec. 1 and 12 set 1/4 ac. cor.
50.05	On south E. bdry. of Tp. 7 lbs. 4.5 of cor. of sec. 1-6-7- and 12
	Fenced Traces
	N. 89° 57' W. on a true line bet. sec. 1 and 12
	On mountainous land
	Descending in rolling slope, in dense oak brush.
50.00	Set at sandstone 18 x 9 x 6 ins. 12 ins. in the ground for 44 ac. cor. marked 1/4 on st. face.
	Raised as mound of stone 2 ft. base 1 ¹ / ₂ ft. high.
	st. of cor. Pitt impractical
45.50	Descent between steep and broken course land S. Enter scattering timber course parallel with ridge
67.00	Three Creek 20 lbs. wide course S. 20° W. in bottom of narrow rocky cañon 875 ft. below cor. -

Subdivision of T. 39 S. 12. 10 sec.

chain	Begins ascent on steep broken slope
80.08	The cor. of sects. 1-2-11 and 12 This cor. stands 240 ft. above creek Land mountainous very rugged Soil rocky and gravelly 4 ch. brak. Timber: scrubby cedar and piñon scattering and a fringe of large pine trees along creek Mountainous land 80.08 chs.
40.00	N 0° 1' W. on a random line bet. sects. 1 and 2 Set bering. 1/4 sec. cor.
78.79	Intersect N. bdy. of Twp. 16 like N. of cor. of sects. 1-2-35 and 36 which is a stone firmly set marked and witnessed as described by the surveyor general Thence down S 0° 6' W. on a true line bet. sects. 1 and 2 On mountainous land Descending on rocky broken slope.
22.00	Enter timber course N. W. and S. E.
33.52	Stream 3 pts. wide flows S.E. in ravine 400 ft. below cor.
	Begins ascent
38.79	Set at Sandstone 18 x 9 x 6 in. 12 in. in the ground for 1/4 sec. cor. marked 1/4 sec. N. face raised a mound of stones 2 ft. base 1 1/2 ft. high W. of cor. Pits impracticable.
46.20	Top of spur E. 250 ft. above stream and beginning of descent on rolling slope to
78.79	The cor. of sects. 1-2-11 and 12 This cor. stands 950 ft. below the cor. of sects. 1-2-35 and 36 Land mountainous very rugged Soil rocky and gravelly 4 ch. brak. Timber: scrubby cedar and piñon, mainly scattering Mountainous land 78.79 chs. May 10. 1899: at this cor. I set off 170 44.0' N. on the decl. arc and at 114 5.6 m. a m., I ent observe the sun on the meridian; the resulting lat. is 37° 28' N.

Subdivision of T. 39 S. R. 10 W.

chains	<p>At the cor. of secs. 2-3-34 and 35 on S. bdy of Th. at 24° 55' m p.m. I set off 37° 29' N. from the lat. arc 17° 46' 00" N. on the decl. arc and determine a true meridian with the polar.</p> <p>Thence I run $N 0^{\circ} 1' W.$ bet. secs. 34 and 35.</p> <p>On mountainous land.</p> <p>Ascending on rocky slope near edge of cañon</p>
4000	<p>Set a sandstone 28x10x7 in. 21 in. in a mound of stones 2 ft. base 2 ft high on rocky bottom, for 1/4 sec cor. marked 14 hrs W. face, from which</p> <p>A fine tree 10 in. diam. bears $45^{\circ} 12' W.$ 19 lbs. dist. marked 14534 B.T.</p> <p>A fine tree 22 in. diam. bears $45^{\circ} 58' E.$ 71 lbs. dist. marked 14535 B.T.</p>
7745	<p>Top of spur N. 600 ft. above sec. cor. and beginning of descent on N. slope to</p>
8000	<p>Set. a sandstone 18x9x7 in. 12 in. in the ground for cor. of secs. 26-27-34 and 35 marked with 1 notch on S. and 2 notches on E. edges, from which</p> <p>A fine tree 16 in. diam. bears. $51^{\circ} 0' W.$ 65 lbs. dist. marked T. 39 S. R. 10 W. 5 34 B.T.</p> <p>No other trees within limits raised a mound of stones 2 ft. base 1 1/2 ft. high N. of cor. - Pith impracticable</p> <p>This cor. stands on N. slope 70 ft below tip of spur Land mountainous, rough and broken soil. barren rock mainly, and sand timber: fine of large size but thin growth - Mountainous land 8000 clz.</p>
	<p>May 10, 1899</p>

May 11, 1899: at 7^h 35^m A.M. I set off 37° 24' N. from the lat. arc 17° 57' N. on the decl. arc and determine a true meridian with the polar at the cor. of secs. 26-27-34 and 35. Thence I run

Subdivision of T 39 S 12 10 W.

chain 4,000	East on a random line bet. sec. 26 and 35- set limb $\frac{1}{4}$ sec. cor.
8,000	Three creek intersect N. and S. line at cor. of sec. 25-26-34 and 35
	Thence S run
	West on a true line bet. sec. 26 and 35-
	On mountainous land
	Descending gradually, in timber
5,700	Bottom of wash 40 ft. deep course S.
11,040	Bottom of gulch 50 ft. deep course S
	Begins ascent on gradual rolling slope to
38,500	Top of ridge 90 ft. above gulch bears N. and S
	Begins descent
40,000	Set a sandstone 18 x 10 x 7 in. 12 in. in the ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ sec. st. face, from which
	A pine tree 10 in. diam. bears N. 64° 9' E.
	35 lbs. dist. marked $\frac{1}{4}$ sec. 26 B.T.
	A cedar tree 5 in. diam. bears S 11° 28' W. 53°
	lbs. dist. marked $\frac{1}{4}$ sec. 35 B.T.
43,220	Bottom of gulch 60 ft. deep course S. and beginning of gradual broken ascent
54,000	Top of low ridge bears N. 30° E and S 30° W
	Begins steep broken descent to
8,000	The cor. of sec. 26-27-34 and 35-
	Thin cor. stands 300 ft. below top of ridge
	Land mountainous broken, rolling
	Soil sandy and rocky 4 ft. rate
	Timber: pine of large size, open growth
	Mountainous land 80,000 chs. -

N 0° 1' W. bet. sec. 26 and 27

On mountainous land

Descending, in timber and undergrowth - to

32,000 Edge of perpendicular sandstone break to canyon
of Three Creek 400 ft. deep. course E. N. 35° 0' E. and S.
35° W. and further chaining is impossible:
I therefore return to the cor. of sec. 26-27-34
and 35 and establish a flag at said cor. and
measure off a base line N. 89° 5.9' E 10,000 chs. and
also establish a flag at that point: - Draw

Subdivision of T. 39 S. R. 10 W.

	chain	go to a point on the opposite side of canon where flag at cor. of secs. 26-27-34 and 35 bears $5.0^{\circ} 1' E.$; and flag at E. end of baseline bears $5.35^{\circ} 0' E.$. Therefore obtain $34.5^{\circ} 9' \times 1000 = . . .$
14,29		Top of N.W. side of Three Creek Canon course $N. 35^{\circ} E$ and $S. 35^{\circ} W.$ about 20 ft above opposite side.- Three creek about 400 ft. below this point crosses the line at about 8.50 chl. 20 lbs wide..
		Begin gradual ascent on rolling slope in dense undergrowth-
		Leave timber
36,80		Top slope bears E. and W.
		Begin descent
39,05		Top of perpendicular sandstone break 250 ft. deep bears W 2.50 chl to N.W. and N.; and E. 2.00 chl. W. point thence S.
39,20		Bottom of break and beginning of steep descent in slide and fragments of rock
40,00		Set w sandstone 28x10x6 ins. 21 in. in the ground for. 1/4 sec. cor. marked 14 on W. face; raised a mound of stones 2 ft. base 1/2 ft. high W. of cor.- Pits impracticable
43,09		Three creek 20 lbs. wide course $55.5^{\circ} E.$ 120 ft. below 1/4 sec. cor.
		Begin ascent on steep slope in slide
49,60		Top of spur W. 140 ft above creek.
		Begin descent on N. W. slope
75,45		Three creek 20 lbs wide course $52.0^{\circ} W$ in bottom of canon 400 ft. deep
		Begin ascent on steep broken slide
8,000		Set w sandstone 27x11x6 ins. 20 ins. in the ground for cor. of secs. 22-23-26 and 27 marked with 2 notches over S. and E. edges; raised a mound of stones 2 ft. base 1/2 ft. high W. of cor. Pits impracticable
		This cor. stands in the canon 150 ft. above creek.
		Land mountainous very rugged
		Soil rocky and gravelly, mainly barren rock
		Timber fine of fair size; a scattering fringe

Subdivisions of T 39 S 17 10 W

chains	along creek in bottom of canon Mountainous land 80,00 chs. -
	May 11, 1899: at this cor. I set off 17° 5' 9" N.W. the decl are und at 114° 56' m a m, (not observed) the sun on the meridian; the resulting lat. is 37° 24' 30" N
	East on a random line bet. sec. 23 and 26
4,000	Set limb. 1/4 sec. cor.
50,24	Intersect N. and S. line 16 lbs. N. of cor. of sec. 23-24-25 and 26 Hence I run 189° 5' W. on a true line bet. secs. 23 and 26
	On mountainous land
	Descending on broken slopes W-
4,95	Beginning of steep rocky descent. corrugated In scattering timber
2,000	Head of ravine drain 5 m.
40,12	Set a sandstone 18 x 10 x 7 in. 12 in. in the ground for 1/4 sec. cor. marked 1/4 sec. N. face raised a mound of stones 2 ft. base 1 1/2 ft. high. N. of cor. Pith impracticable
44,10	Bottom of ravine 700 ft. below cor. course S. 38° W. Begin ascent
62,00	Top of ridge 290 ft. above ravine course S 25° W. and N. 26° E
	Descending to
75,30	Top of perpendicular sandstone break in canon course about N. and S. 200 ft. deep
75,45	Bottom of break and beginning of steep descent in slide
78,75	Three Creek 20 lbs. wide course S 15° W. in bottom of narrow box canon
	Begin ascent
80,24	The cor. of sec. 22-23-26 and 27 Land mountainous very broken Soil rocky, sandy and clay Timber: scrubby cedar and piñon scattering Mountainous land 89,24 chs. -

No° 1 W. bet. sec. 22 and 23

Subdivision of T. 39 S. 1/10 W.

Chain	On mountainous land
34.83	Ascending on steep slope in scattering timber Foot of perpendicular sandstone precipice 175 ft high bears N 15° E and S 15° W
35.04	Top of precipice and beginning of gradual ascent
40.00	Land timbered: under dense undergrowth - Set a black lava rock 18 x 10 x 6 ins. 12 ins in the ground for 1/4 sec cor. marked 1/4 on W. face raised a mound of stones 2 ft. base 1 1/2 ft high W. of cor. Pili impracticable
55.00	Beginning of steep descent on loose clay and slate. course N W and S. E. The upper end of a cattle trail leading N. 30° E down to the creek bears E. about 4.00 chs
76.83	Bottom of ravine draining E. 350 ft below W. of slope. -
- 80.00	Begin ascent on S.E. slope Set a sandstone 28 x 10 x 6 ins. 21 ins in the ground for. cor. of secs. 14-15-22 and 23 marked with 2 notches on E. and 3 notches on S. edges: raised a mound of stones 2 ft. base 1 1/2 ft. high W. of cor. - Pili impracticable This cor. stands on steep slope S. in loose soil and 100 ft above bottom of ravine. - Land mountainous Very rugged soil gravelly rocky, clay and sand: 4 chs. rate Timber: scrubby cedar scattering Mountainous land 8,000 chs. -

May 11, 1899

May 12: 1899 at 7432 m.s.m., I set off 37°
25' 30" from the lat. arc 18° 12' N on the decl.
arc and determine a true meridian with
the solar at the cor. of secs. 14-15-22 and 23
Thence I run
889° 53' E on a true line bet. secs. 14 and 23
Set leinfs. 1/4 sec. cor.
Intersect N. and S. line 16 chs. S. of cor. of secs.
13-14-23 and 24
Thence I run

Subdivision of T. 39 S. 19, 10 W.

chains	West on a. tree line bet. sects. 14 and 23 On mountainous land Descending on black lava rock and through dense oak brush
1,00	Top of steep broken slope to canon, coarse N 10° E and S 10° W.
4,005-	Set a black lava stone 18 x 10 x 7 in., 12 in. in the ground for 14 sec. cor. marked 14 on W. face; raised a mound of stones 2 ft. base 1½ ft. high W. of cor. Pits impracticable
6,676-	Top of perpendicular sandstone break 100 ft. deep coarse N. and S.
7,2,55	Three Creek 20 chs. wide swift current course S. 20° W. in bottom of narrow canon 1050 ft. below sec. cor.
	Begin ascent
8,0,10	The cor. of sects. 14-15-22 and 23 Thin cor. stands 260 ft. above creek Land mountainous very rugged Soil rocky, clay and sand Timber: a fringe of pine along creek and a few scattering cedar Mountainous land 8010 chs. -

	N 0° 1' W. bet sects. 14 and 15 -
	On mountainous land
	Ascending in loose soil and slide
5,00	Lava slide: entered lava boulders and dense oak brush
8,90	Top of canon and spur N. 75° E 350 ft above cor.
	Begin gradual descent on N. E slope
2,6,08	Bottom of draw coarse S E 140 ft below spur
	Ascending on S. W. slope
3,6,00	Top of round hill, slope W. 175 ft above draw
	Begin descent
4,0,00	Set a black lava stone 18 x 10 x 6 in., 12 in. in the ground for 14 sec. cor. marked 14 on W. face: raised a mound of stones 2 ft. base 1½ ft. high W. of cor. -
	Pits impracticable
5,6,25	Head of ravine 400 ft below top of hill and

Subdivision of T 39 S 10 W.

	drainit	N. $80^{\circ} E$ Ascending gradually to
	58,30	Top of spur E. and beginning of descent on broken N.E. slope
-	8,000	Set at sandstone 28x9x8 ins. 21 ins. in the ground for cor. of sec. 10-11-14 and 15 marked with 2 notches on E and 4 notches on S. edges; raised a mound of stones 2 ft. base 1½ ft. high N. of cor. Pits impracticable This cor. stands about 540 ft. below the 14 sec. cor. Land mountainous broken and rugged soil gravelly and rocky & chrate No timber; Dense oak brush undergrowth Mountainous land 8,000 ft. - May 12: 1899; at this cor. I set off $10^{\circ} 14' N$ on the decl arc and at $114^{\circ} 56' A$ in 7 mts observed the sun on the meridian; the resulting lat. is $37^{\circ} 26' 30'' N$
	40,000	East on a random line bet. secs. 11 and 14 let comp 14 sec cor.
	80,18	Intersect N and S line 12 mts. N of cor of secs. 11-12-13 and 14 Hence true $N 89^{\circ} 53' W$ on a true line bet. secs 11 and 14 On mountainous land In scattering timber
.	.25	Began ascent on N.E. slope of ravine
	14,60	Top of spur S.W. 260 ft. above cor.
	28,40	Began descent on steep broken slope of canon Three creek 20 lbs. wide course S $30^{\circ} W$. in bottom of narrow canon 380 ft below spur Began ascent on rocky steep slope
	40,09	Set at Sandstone 26x9x8 ins. 20 ins in the ground for 14 sec. cor. marked 14 on N. face; raised a mound of stones 2 ft. base 1½ ft. high N. of cor. - Pits impracticable
	47,00	Top of south end of long sharp ridge dividing canons, 400 ft. high course + $10^{\circ} E$ and S $100^{\circ} W$.

Subdivision of T 39 S 17 W.

chain 63,10	Begin. steep rocky descent on broken sloped Creek 13 ft. wide courses 20° E in bottom of narrow rocky cañon 375 ft. below tip of ridge Begin ascent and leave timber
71,15	Foot of precipice 80 ft. high covered N. and S.
71,30	Top of precipice and beginning of gradual ascent on rolling slope
80,18	The cor. of secs. 10-11-14 and 15. Thin cor. stands 420 ft. above the creek Land mountainous very rugged Soil rocky and gravelly 4 th rate Timber: scrubby cedar scattering.— Mountainous land 80,18 chs.—
	$40^{\circ} 1' W.$ bet. secs. 10 and 11
	On mountainous land
10,30	Descending gradually on broken E. slope
13,50	Begin steep descent to
	Bottom of ravine 120 ft. deep course E
	Begin steep ascent
16,25	Top of ravine 20 ft. below opposite bank and beginning of gradual descent on broken slope
39,45	Wash draining E and bottom of slope 300 ft. below cor.
	Begin ascent on gradual rolling slope
40,00	Set at sandstone 18x9x7 in. 12 in. in the ground for $\frac{1}{4}$ sec cor. marked $\frac{1}{4}$ on W. face raised a round of stones 2 ft. base 15 ft. high W. of cor. Pitti impracticable
51,80	Top of slope and spur E 80 ft. above wash Begin descent on gradual broken slopes N.E.
80,00	Set at sandstone 26x10x8 in. 20 in. in the ground for cor. of secs. 2-3-10 and 11 marked with 2 notches on E and 5 notches on S. edges! raised a round of stones 2 ft. base 15 ft. high W. of cor. Pitti impracticable Thin cor. stands 480 ft. below cor. of sect. 10-11-14 and 15
	Land mountainous broken rolling slope Soil gravelly and rocky 4 th rate No timber!

Subdivision of T 39 S 19 10 W.

	chain	Dense oak brush undergrowth the whole distance Mountainous land 80,00 chs. May 12, 1899.
	4,000	May 13, 1899.: I run S. 89° 55' E. 61d. at random line bet. secs. 2 and 11 Dist. limpf. 1/4 sec. cor.
	8,000	Intersect N. and S. line 16 lbs. S of cor. of secs. 1-2-11 and 12 Thenel I run S 89° 5' 8" W. on a tree line bet. secs. 2 and 11 On mountainous land Ascending on steep slope in timber Scars timber covered N. and S. Ascent becomes less steep and broken
	12,000	Top of ridge 600 ft above cor. course N and S Begin descent on steep rocky slope Set at sandstone 18 x 10 x 9 ins. 12 ins in the ground for 1/4 sec. cor. marked 1/4 on W. face. from which
	18,000	A juniper tree 13 ins. diam. bears S 55° 47' E. 22 lbs. dist. marked 1/4 S 11 B.T. A cedar tree 14 ins diam. bears N. 31° 30' W. 15 lbs. dist. marked 1/4 S 2 B.T.
	23,600	Creek 12 lbs. wide swift current course S. in bottom of narrow cañon 400 ft below top of ridge Begin steep ascent, in dense oak brush Ascent becomes more gradual and rolling course N. and S.
-	8,000	The cor. of secs. 2-3-10 and 11 This cor. stands 400 ft above creek Land mountainous very rugged Soil gravelly and rocky & shale Timber: scrubby cedar Dense oak brush undergrowth w. of creek Mountainous land 80,00 chs. -
	4,000	N 00° 1' W. on a random line bet. secs. 2 and 3 Set limpf 1/4 sec. cor.

Subdivision of T 39 S R 10 W

Chains

78.31

Intersect N. bdy of Tp. 28 lbs. N. of cor. of secs
2-3, 34 and 35 which is a line fairly set
marked and witnessed as described by the
surveyor general.

Thence I run.

$5.0^{\circ} 11' \text{ N.}$ on a true line bet. secs. 2 and 3
On mountainous land.

Descending on steep rocky slope

In scattering cedar timber and dense brush
Creek 12 lbs. wide course 5.60° E in bottom of
narrow gulch 600 ft. below cor.

Begin ascent and leave timber, course parallel
with creek

38.31

Set a sandstone 18 x 9 x 7 ins. 12 ins. in the ground
for 1/4 sec cor. marked 1/4 on W. face; raised
a mound of stones 2 ft base 1 1/2 ft. high N.
of cor. Pili impracticable

50.00

Ascent becomes less steep on rolling N. E. slope

78.31

The cor. of secs. 2-3-10 and 11.

This cor. stands 330 ft above creek.

Land mountainous very broken

Soil rocky and gravelly ~~calcareous~~

Timber scrubby cedar and pinyon scattering

Dense oak brush undergrowth

Mountainous land 78.31 chs. —

May 13. 1899: The sky being cloudy during
the noon hour I could not observe the sun
on the meridian. —

May 13. 1899 at 3.430 m p.m., 2 m² I set off 37°
23' from the lat. and $18^{\circ} 31'$ N. on the decl. and
determined a true meridian with the solar
at the cor. of secs. 34-33 and 34 on S. bdy of Tp.
Thence I run

$10^{\circ} 2' \text{ N.}$ bet. sec. 33 and 34

On mountainous land

Ascending on steep broken E. slope

In scattering timber

34.80

Foot of perpendicular cliff 130 ft high bears

$N. 20^{\circ} \text{ E}$ and $S. 20^{\circ} \text{ W}$

Chains

- 35.05 Top of break and beginning of br. knew ascent
 40.00 Set w sandstone 15x9x6 in. 12 in. in the
 ground for $\frac{1}{4}$ sec cor. marked $\frac{1}{4}$ sec N. face
 from which
 16 cedar trees 10 in. diam bears 431° 50' N. 53'
 1st. dist. marked $\frac{1}{4}$ S. 33 E.T.
 Qd pine tree 11 in. diam. bears 444° 16' E. 37'
 2nd. dist. marked $\frac{1}{4}$ S. 04 E.T.
 65.00 Top of cliff 8750 ft above cor.
 Begin broken descent to
 80.00 Set w sandstone 18x9x8 in. 12 in. in the
 ground for cor. of secs. 27-28-33 and 34 marked
 with 1 redches on S. and 2 redches on E. edges.
 raised w accumulation of stones 2 ft base 1 $\frac{1}{2}$ ft. high
 W. of cor. Pct. impracticable
 Thin cor. clastic 200 ft. below top of cliff
 Land mountainous very rugged
 Soil rocky and sandy & erratic
 Timber, fine and cedar scattering
 Mountainous land 8,000 chs.-

- East on a random line bet. sec. 27 and 34
 105 Edge of perpendicular sandstone break to canyon
 300 ft. deep bears N.W. and S.E. and further
 claiming is impossible I therefore return
 to the cor. of secs. 27-28-33 and 34 and
 establish a flag at said cor. and measure
 a baseline due north 15.03 chs. where I also
 establish a flag and go to the N. side of canyon
 to a point where the flag at sec cor. bears
 S. 27° E. and flag at N end of base bears
 S. 39° 44' W. therefore co-lin 39° 44' X 15.00 = 1
 Offset North 18.04 chs.: thence on offset line
 East 40.00 chs.

South 18.04 chs. is the random line at
 40.00 Set line $\frac{1}{4}$ sec. cor. on which at
 45.00 West edge of Three Creek Canyon, perpendicular
 sandstone wall 400 ft. deep and further
 claiming is impossible; set line with compass
 Hence offset as follows

Subdivision of T 39 S 12.10 W

Chain	North 14.30 chs. thence on offset line
79,90	East 11.85 chs. intersect N and S line at 14.39 chs. N 0° 1' W from cor. of secs. 26-27 34 and 35 - which can not be reached on account of canyon
	Thence S run
	N 89° 56' W on a true line bet. secs. 27 and 34 as follows: from point of intersection on offset line N 89° 56' W 11.85 chs.
	South 14.39 chs. to true line at
11.83	On W. edge of Three Creek Canon 8.50 chs wide 400 ft deep with creek 20 chs wide flowing along the bottom midway between walls. Ascend gradually to
21.00	Top of slope and beginning of descent
35,90	Bottom of short ravine 200 ft deep courses S. Begin ascent on steep rocky slope to
39,95	Set as sandstone 18 x 9 x 7 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on its face; from which
	A pinion tree 15 ins. diam. bears S 39° 57' E 37 chs. dist. marked 1/4 S. 34 B.T.
	A pinion tree 19 ins. diam. bears N 56° 58' E 22 chs. dist. marked 1/4 S 27 B.T.
	Raised as mound of stones 2 ft base 15 ft high N. of cor.
40,60	Top of spur 5 25 ft above cor. and edge of rocky canon 400 ft deep with perpendicular walls. courses N. 60° W. and S 60° E.
	Thence offset North 18.04 chs.; thence on offset line N 89° 56' W. 39.30 chs. thence
	South 18.04 chs. (by triangulation) to
79,90	The cor. of secs. 27-28-33 and 34 Land mountainous very broken soil rocky and gravelly; 40% slate between canons Timber: scrubby cedar and pine scattering Mountainous land 79,90 chs. -

May 13, 1899

May 14, 1899 I run

N 0° 2' W. bet. secs. 27 and 28

Subdivision of T. 39 S. 12.10 W.

chain	On Mountainous land Descending to
.95-	Edge of perpendicular sandstone break 400 ft. deep course N.W. and S.E. to a canon in the bottom of which flows a tiny stream 5 or. - Further chaining impossible hence I go to the point on N. side of canon established by me May 13. 1899 by triangulation at 18,04 North of cor. and offset West 2 links to the line at
18.04	North edge of canon and tip of perpendicular break course N. 60° W and S. 60° E Begin ascent: in timber
36.60	Top of spur E 200 ft above canon Begin descent.
4,000	Timber becomes scattering Set a sandstone 24 x 8 x 7 in. 18 in. in the ground for 14 sec. cor. marked 1/4 on W. face raised a mound of stones 2 ft. base 1 1/2 ft. high N. of cor. Pill impracticable. -
69.00	Bottom of hollow 80 ft deep drains S. 60° E Ascending to
78.00	Top of ridge 90 ft. high bears E and W. Begin descent to
8,000	Set a sandstone 18 x 8 x 5 in. 12 in. in the ground for cor. of secs. 21-22-27 and 28 marked with 2 notches on S and 3 notches on E. edges: from which A cedar tree 14 in. diam. bears N. $50^{\circ} 32' W.$ 29 lbs. dist. marked T. 39 S. 12.10 W. S. 21 B.T. A cedar tree 8 in. diam. bears S. $55^{\circ} 0' 8' W.$ 38. lbs. dist. marked T. 39 S. 12.10 W. S. 28 B.T. A cedar tree 6 in. diam. bears S. $42^{\circ} 37' E.$.86. lbs. dist. marked T. 39 S. 12.10 W. S. 27 B.T. A juniper tree 7 in. diam. bears N. $0^{\circ} 25' E.$.40. lbs. dist. marked T. 39 S. 12.10 W. S. 22 B.T. Land mountainous broken and rolling Soil gravelly and rocky 4 ch rate Timber: juniper cedar and pine; mainly of small size and scattering. -- Mountainous land 8,000 chs. --

Subdivision of T 39 S 17 W

Chains	
	5.89056' E on a random line bet secs. 22 and 27
4,000	Not being 1/4 sec cor.
80,00	Intersection N. and S. line 10 ths S of cor. of sec. 22-23-26 and 27.
	Thence down
	West on a true line bet. secs. 22 and 24
	On mountainous land
	Ascending steep rocky slope in canon
	In scattering timber and dense brush
21,00	Top of canon. course N. 75° E and S. 75° W. 600 ft above cor.
	Enter rolling bench and sagebrush with a few scattering pine trees
31.44	Wash 25 ft deep drains S. 16° E to break of canon in 400 chs.
	Begin gradual ascent
40,03	Set at black lava rock 18 x 9 x 7 ins. 12 ins in the ground for 1/4 sec cor marked 1/4 sec N. fall. raised a mound of stones 2 ft. base 1 1/2 ft. high N. of cor. Site impracticable
63,00	Begin ascent, course N.W. and S.E.
	Enter timber parallel with slope
80,06	The cor. of secs. 21-22-27 and 28
	This cor. stands 300 ft above wash
	Land mountainous broken and rolling
	Slope gravelly and rocky, 3rd rate above canon
	Timber: piñon pine and cedar; mainly scattered. -
	Mountainous land 80,06 chs. -
	May 14. 1899: The sky being overcast during the noon hour I could not observe the sun on the meridian. -
	A 0° 2' W. bet. secs 21 and 22
	On mountainous land
	Descending, in. timber
955	Bottom of hollow 80 ft deep course E.
	Ascending W.
13.00	Top of spur E. and beginning of descent.
26.60	Bottom of ravine 100 ft. deep. course E.

Subdivision of T 39 S 12 10 W.

claims	Begin ascent
31,50	Top of spur E and beginning of descent to dry wash in bottom of gulch 90 ft. deep. Course S 70° E
37,65	Begin ascend on rocky slope Leave timber
40,00	Set as black lava rock 28x10x9 ins. in a mound of stones 3 ft. base 2 ft. high on rocky bottom for 1/4 sec. cor. marked 1/4 on W. face! Pits impracticable
	Thin cor. stands in a perpendicular lava ledge 10 ft. high running E. and W.
42,00	Top of spur E. 80 ft. above wash.
	Descending gradually to
46,00	Bottom of slope bears E. and W. nearly level flat extending to canon on the east and about 1/2 mile West.
	Enter dense undergrowth - course E. and W.
51,00	Surface becomes broken on E. slope
59,00	Dry wash 12 ft. deep course S 53° E
	Begin ascent course S 53° E and W.
87,77	Set as Sandstone 18x12x8 ins. 12 ins. in the ground for cor. of secs. 15-16-21 and 22 marked 39 S. on N.E. an 10 on W. faces with 3 notches on S. and E. edges: from which A cedar tree 18 ins. diam. bears S 54° 00' E. 96. Chs. dist. marked T 39 S 12 10 W 522 K.T. No other trees within limit
	Raised as mounds of stones 2 ft. base 15 ft. high W. of cor. Pits impracticable
	Thin cor. stands about 200 ft. above the cor. of secs. 21-22-27 and 28
	Land is mountainous nothing, and nearly level Soil sandy loam and gravelly 2nd and 3rd rate
	Trees; piñon cedar and pine
	Dense undergrowth of sagebrush, thorn and oak brush
	Mountainous land and dense undergrowth 8,000 chs. -

Subdivision of T. 39 S. R. 10 W.

chains	May 14, 1899: At 3 p.m., I set off 37° 25' 30" N. lat. and 104° 45' 30" W. lon. the decl. arc and determine a true meridian with the solar at the cor. of secs. 15-16-21 and 22: thence I run East on a random line bet. secs. 15 and 22 Set limits 1/4 sec. cor.
4,000	Intersect N and S. line 19 ths. S. of cor. of secs. 14-15-22 and 23 Thence I run S. 89° 6' 2" W on a true line bet. secs. 15 and 22 On mountainous land Descending in steep slope in slide, on side of canon
17,50	Top of steep slope and slide bears N. and S. 600 ft above cor. Begin gradual ascent
25,60	Top of spur S.E. about 700 ft above cor. Begin steep broken descent
39,30	Dry wash coarse S. 275 ft. below spur Begin gradual ascent on rolling surface and S. slopes
39,87	Set a sandstone 18 x 10 x 6 in. 12 in. in the ground for 1/4 sec. cor. marked 1/4 or 0 ft. face, raised as mound of stones 2 ft. base 1 1/2 ft. high at top. Pit impracticable. -
61,18	Dry wash 50 ft deep coarse S
79,00	Top of spur 40 ft high runs S. and beginning of descent
79,94	The cor. of secs. 15-16-21 and 22 Land mountainous broken and rugged Soil rocky gravelly and sandy 1/4 br. rate Timber: scattering cedar and pines of small size on E. 1/2 mile Dense oak brush undergrowth on W. 1/2 Mountainous land 79,94 obs. -

May 14, 1899

May 15, 1899 at 7438 m a m. I set off
37° 25' 30" N. lat. and 104° 56' 0" W. lon.
the decl. arc and determine a true meridian

Subdivision of T. 39 S. R. 10 W.

	Claims with the corals at the cor. of secs. 15-16-21 and 22. Hence 0 river
	N. 0° 2' 97' bet. secs. 15 and 16
	On mountainous land
	According on broken slopes in dense oak brush
39,50	Wash 60 ft deep course S. 05° E
39,50	Wash 20 ft. deep course S E
40,50	Pet. w. sandstone 18 x 7 x 7 in., 12 in. in the ground for 1/4 sec. cor. marked 1/4 on N. face; raised a mound of stones 2 ft. base 1 1/2 ft. high N. of cor. Pits impracticable
39,15	Wash and bottom of ravine 60 ft deep course S 60° E
8,000	Pet. w. sandstone 18 x 10 x 6 in., 12 in. in the ground for cor. of secs. 9-10-15 and 16 marked with 3 notches on E. and 4 notches on S. edges raised a mound of stones 2 ft. base 1 1/2 ft. high N. of cor. Pits impracticable This cor. stands 800 ft above the cor. of secs. 15-16-21 and 22
	Land mountainous broken slopes Soil gravelly and rocky 4 ft. rate No timber. —
	Dense oak brush the entire distance Mountainous land 8,000 ft. —
	N 89° 52' E on a random line bet. secs. 10 and 15
4,000	Pet. limy 1/4 sec. cor.
7,7,50	Border bet. N. and S. line at cor. of secs. 10-11-14 and 15
	Thence 9000
	S 89° 52' 97' on a line line bet. secs. 10 and 15
	On mountainous land
	According on broken slopes in dense oak brush
39,93	Pet. w. sandstone 18 x 7 x 6 in., 12 in. in the ground for 1/4 sec. cor. marked 1/4 on N. face raised a mound of stones 2 ft. base 1 1/2 ft. high N. of cor. Pits impracticable
7,7,05	Tops of spurs S. E 700 ft. above sec. cor. begin descent
7,7,86	The cor. of secs. 9-10-15 and 16

Subdivision of T 39 S 10 W

chain	<p>Land mountainous steep broken slopes soil gravelly and rocky 4th rate - No timber Dense oak brush the whole distance Mountainous land 79.86 chs.</p> <p>May 15: 1899: at this cor. Set off 18° 5' 7": N. on the decl. are and at 1145' m a m, but observe the sun over the meridian the resulting lat. is 37° 2' 6" 30' N</p>
6.20	<p>N 0° 2' W. bet. secs. 9 and 10 On mountainous land Descending on S. slope in dense oak brush Road from valley to Crystal Springs bears N.E. and S.W.</p>
13.00	<p>Top of spur E. 140 ft above cor. Begin descent on broken slopes</p>
31.02	<p>Same road as above bears N 20° W and S 20° E</p>
40.00	<p>Set a sandstone 18x9x8 in. 12 in. in the ground for 1/4 sec. cor. marked 1/4 on N. face from which</p>
	<p>An oak tree 4 in. diam. bears S. 60° 5' 6" W 7 chs. dist. marked 1/4 S. 9 R.T.</p>
	<p>An oak tree 4 in. diam. bears S. 61° 45' E 31 chs. dist. marked 1/4 S. 10 R.T.</p>
47.60	<p>Head of Birch Spring bears N 58° 32' W. 21.30 chs. An old log cabin few and mill house claimed by John R Terry is located on S. side of spring all the improvements are ruined and have not been occupied for several years. - Spring drains N 60° E. a tiny stream which sinks in about 2. chs. -</p>
61.85	<p>Dry wash. 4 ft deep course N 60° E</p>
62.50	<p>Road, same as above bears N.E. and S.W.</p>
71.25	<p>Road " " " NW and S.E.</p>
80.00	<p>Set a sandstone 18x11x6 in. 12 in. in the ground for cor. of secs. 3-4-9 and 10 marked with 3 notches on E. and 5 notches on S. edges raised a mound of stones 2 ft. base 1 1/2 ft. high N. of cor. Pitt impractical. -</p>
	<p>An oak tree 11 in. diam bears S. 7° 30' E 27 chs.</p>

Subdivisions of T. 39 S. 16. 10 W.

chains	dist marked T. 39 S. 16. 10 W. S. 10 B. T. An oak tree 9 in. diam. bears S 26° 16' W. 96 ft. dist. marked T 39 S 16 W. S 9 B.T. No other trees within limit This cor. stands 600 ft. below the top of spur Land mountainous, broken slope Soil gravelly 3rd rate No timber. Dense, and rank oak brush, the whole distance some few reaching the size of trees Mountainous land 80,00 chs.
4,000	489 052' 6 on a random line bet. sec. 3 and 10. Set limb 1/4 sec. cor.
77,92	Intersect st. and S. line 18 lbs. N. of cor. of recs. 2-3-10 and 11 Thence Grand West on a true line bet. recs. 8 and 10. On mountainous land.
39,96	Ascending on broken slope in dense oak brush Set at sandstone 20 x 11 x 4 in. 19 in. in the ground for 1/4 sec. cor. marked 1/4 on its face; raised at mound of stones 2 ft. back 1 1/2 ft. high N. of cor. Pile impracticable The cor. of recs. 3-4-9 and 10. This cor. stands 500 ft. above the cor. of recs. 2-3-10 and 11 Land mountainous broken slope Soil gravelly 3rd rate No timber Dense, high oak brush, the whole distance Mountainous land 79,92 chs.
4,000	400 2' W. on a random line bet. sec. 3 and 4. Set limb 1/4 sec. cor.
77,81	Intersect st. bdy. of Th. 47 lbs N. of cor. of recs. 3-4-33 and 34. which is a stone firmly set marked and witnessced as described by the Surveyor General Thence Grand 80 18' W. on a true line bet. recs. 3 and 4.

Subdivision of T. 39 S. 12. 10 W.

Chain	On mountainous land
2,000.	Ascending on broken slope, in dense oak brush Spring 30 like drain seeps. N. 75° E.
37.81.	Set a sandstone 18x9x9 in., 12 in. in the ground for 14 sec cor. marked 14 on W. face raised a mound of stones 2 ft base 1½ ft high N. of cor. - Pits impractical N.E. cor. of a log cabin claimed by Langston & Woods bears S. 35° 29' W. 1.79 chs. dist. This cabin is known as the Crystal Springs cabin Leavel oak brush course E and W.
39.78	Spring branch 2 lbs. wide course E. from Crystal Springs 1.60 chs west
42.66	Fenced bears N. 20° E. S. chs and S. 20° W. Enter Langston & Woods pasture
45.65	Bottom of ravine drains N. E. Cabin of Arthur Bennett bears N. 44° 2' E. 16.00 chs. Cabin is partly finished as also is a brush fence inclosing about 4 acres on S. of cabin
50.20	Fenced bears N. E. and S. W. Leavel pasture
60.32	Road from Valley to Crystal Springs bears N. E. and S. W.
63.00	Enter Oak brush course E and w.
77.81	The cor. of secs. 36-7 and 10 This cor. stands 480 ft. above the cor. on the bdy. of T.P. Land mountainous broken slope soil gravelly 3rd rate No timber: Dense oak brush, a few reaching the size of trees. - Mountainous land 77.81 chs. -
	May 16, 1899

May 16, 1899 at 8h 45m a m, I set off 37°
23' from the lat. arc 19° 9' 30" N. on the decl. arc
and determine a true meridian with the
Polaris at the cor. of secs. 4-5-32 and 33 on S.
bdy. of T.P.; thence I run
N 0° 3' W. bet. secs 32 and 33
On mountainous land

Geological Survey of Ontario

1886. Dredging gradually on edge of lake -
only edge broken. At
edge of perpendicular sandstone bank 10 ft.
10 ft. deep crossed at 21° N. and 22° E. by S.
and further thinnings in thickness of rock
at a flag on line at this point and
crossing a baseline 38° 15' N. 8° 30' E.
a flag, and go to the opposite side of river
where flag on line bear 50° 3' E.
and flag at the end of bank bear 52° 30' W. along
which east & west = 13° 22' or 1000 ft.
1886. At edge of perpendicular sandstone bank 10 ft.
10 ft. deep crossed at 21° N. and
22° E. across the side sloping S.E.
along the bottom
seen several small mounds brush
cover them
1886. Seen which stand on bottom slope covered with
mud & silt.
1886. Colored banks parallel with slopes
and at a distance 18° 45' S. from the line
perpendicular to the surface
from which
the colors bear 10° 45' S. from the line 37° 15' N.
At the end covered 10° 30' N.
See often with nothing found
Crossed a narrow gl. stone 2 ft. base 12 ft.
height 10 ft. on side unbreakable
seen often at 10 ft. above bottom and beginning of
bottom
1886. Bottom of ravine dipping 10° 30' ft. deep
seen bottom
1886. Edge of ridge facing S. 20° W. and S. 20° E. 100 ft. high
edge of red sandstone dipping 10° 30' E.
10 ft. high a horizontal 10 ft. sandstone layer in the ground
for one of over 20° 10' 30' and 20' inclined with
vertical on sand a mounds on C. edge. From which
a color line 20° 10' 30' and 20' inclined
and covered 7.37° N. 10° E. 10.00 ft.
in other face nothing found
Crossed a number of times at the same depth

Subdivision of T. 39 S 1210 W

	W. of cor. Pitt impracticable. Land mountainous very broken Soil rocky and gravelly 4 th rate Timber, pinion, pine and cedar mainly scattering Dense oak and thorn brush undergrowth Mountainous land 8,000 chs. -
4000	East on a random line bet. secs 28 and 33 Set limb: 1/4 sec. cor.
80,16	Intersect N and S. line at cor. of secs. 27-28-33 and 34 Piney Woods. West on a line line bet. secs. 28 and 33 On mountainous land Ascending on broken N & E. slope in scattering timber and dense brush
40,08	Set. a limestone 18 x 8 x 7 in. 12 ins. in a mound of stones 1 1/2 ft. base 1 1/2 ft. high on rocky bottom for 1/4 sec. cor. marked 1/4 4000 N. face, from which a cedar tree 14 in. diam. bears. S. 9° 45' W. 81 U. R. 10 dist. marked 1/4 S 33° 13' T. - No other trees with no limit raised or mound of stones 2 ft. base 1 1/2 ft. high n of cor. - Pitt impracticable
40,70	Tp. of slope and ridge running N and S.E. 400 ft above cor. Begin descend on broken slope
66,50	Bottom of ravine 150 ft deep. course S. Ascending to
81,70	Top of spur 3.90 ft. high and beginning of descent to
77,30	Bottom of gulch 90 ft. deep course S. Ascend to
80,16	The cor. of secs. 28-29-32 and 33 Land mountainous broken and rolling Soil gravelly and rocky 4 th rate Timber, pine, cedar and pinon scattering Dense oak brush undergrowth Mountainous land 8,016 chs. - May 16. 1899 at this cor. I set off 19° 15' " " N. on the decl. arc and at 114° 56' a m, 7 m Observe the sun on the meridian, the

Subdivision of T. 39 S. 12. 10 m.

Chain	resulting lat. is $37^{\circ} 24' N.$
	N $0^{\circ} 3' W.$ bet. secs. 28 and 29 On mountainous land Ascending in scattering timber and dense brush
14.00	Top of ridge bears E. and W. 120 ft above cor. Begin descent
28.40	Bottom of gully S $66^{\circ} 0' W.$ 150 ft deep. Ascending to
40.00	Set at Sandstone 24 x 10 x 6 in. 18 in. in a mound of stones 2 ft base 1½ ft. high on rocky bottom for 1/4 sec. cor. marked 1/4 NW. W. face; from which A cedar tree 9 in. diam. bears N $48^{\circ} 57' E.$ 26 lbs dist. marked 1/4 S 28. B.T.
	A cedar tree 7 in. diam. bears N $86^{\circ} 30' W.$
	16 lbs. dist. marked 1/4 S. 29 B.T.
66.00	Top of spur N. W. 200 ft. high Begin descent on N. E. slope
80.00	Set at sandstone 18 x 7 x 6 in. 12 in. in the ground for cor. of secs. 20-21-28 and 29 marked with 2 notches on S. and 4 notches on E. edges; raised a mound of stones 2 ft. base 1½ ft. high N. of cor. - Pits impractical This cor. stands on steep E. slope 130 ft. below top of spur. - Land mountainous very broken Soil gravelly and rocky 3rd rate Timber, pine, piñon and cedar scattering Mountainous land 80,000 acs. -
	East on a random line bet. secs. 21 and 28 Set limb. 1/4 sec. cor.
40.00	Intersect N. and S. line 5 lbs. N. of cor. of secs. 21-22-27 and 28 Then westward
79.96	N $89^{\circ} 58' W.$ on a true line bet. secs. 21 and 28 On mountainous land Ascending gradually in rolling N. slope In timber

Subdivision of T. 39 S R 10 W

chains	
23,00.	Top of spur N 15° ft above cor. Begin descent
27,90	Bottom of gulch draining S.; near its head and about 30 ft deep
	Ascending
34,40	Top of ridge bears S 15° E and N 15° W 90 ft. high Begin descent on N. side of ravine running S. 70° W. C. on thence S E
39,45	Set a sandstone 24 x 7 x 5 in. 18 in. in the ground for 1/4 sec cor. marked 1/4 sec ch. face; from which A piñon tree 7 in. diam. bears S 27° 40' E 63 lbs. dish. marked 1/4 S 28 B.T. A piñon tree 15 in. diam. bears N 49° 5' W. 49 lbs. dish. marked 1/4 S. 21. B.T.
54,55	Bottom of gulch 150 ft deep drains S Begin ascent
61,45	Top of spur S 100 ft high and beginning of descent
68,40	Bottom of ravine 110 ft deep course S.
	Ascending
73,00	Top of spur S 75° ft high and beginning of descent
78,30	Bottom of gulch 80 ft. deep course S E. Begin ascent
79,90	The cor. of secs. 20-21-28 and 29 Land mountainous very broken Soil gravelly 3rd rate Timber fine piñon and cedar, mainly scattering. Some oak brush Mountainous land 79,96 chs. -
	May 16, 1899
<i>invent 4000 ft.</i>	

May 17, 1899 I run
N. 0° 3' W. bet. secs. 20 and 21
On mountainous land
Descending, in scattering timber and dense
brush
Bottom of gulch drains S.E.
Begin ascent

Subdivision of T. 39 S R 10 W

chains	
25.25	Top of ridge bears S & and N.W. -Leave timber Thence on gradual descent on rolling slope to Set a black lava rock 15x7x9 in., 12 in. in the ground for 1/4 sec. cor. marked 1/4 sec. N. face; raised a mound of stones 2 ft base 1 1/2 ft. high N. of cor. Pits impracticable
4,000	Dry wash 10 ft deep course S 5° E. Begin ascent on steep rocky slope.
46.45	Set a black lava rock 18x8x6 in., 12 in. in the ground for cor. of secs. 16-17-20 and 21 marked with 3 notches on S. and 4 notches on E edges.; raised a mound of stones 2 ft. base 1 1/2 ft. high N. of cor. Pits impracticable This cor. stands 700 ft above the cor. of secs. 20-21-28 and 29
8,000	Land mountainous steep broken slope Soil gravelly and rocky 4 th rate Timber; pine, piñon and cedar scattering Dense undergrowth of oak brush and thorn Mountainous land 80,000 ac.
4,000	S. 89° 58' E. on a random line, bet. secs. 16 and 21 Set limb 1/4 sec cor.
79.92	Intersection N and S. line 1/4 blk. N of cor. of secs. 15-16-21 and 22 Thence S 2° E. N 89° 52' W. on a true line bet. secs. 16 and 21 On mountainous land
0.50	Ascending on steep broken slope on oak brush Dry wash 10 ft deep course S 5° E.
39.96	Set a sandstone 24x9x6 in., 18 in. in the ground for 1/4 sec. cor. marked 1/4 sec. N. face; raised a mound of stones 2 ft. base 1 1/2 ft. high N. of cor. Pits impracticable Top of spur 5,600 ft above sec. cor.
70,00	Begin descent
79.92	The cor. of secs. 16-17-20 and 21 This cor. stands 90 ft below top of spur Land mountainous broken steep slopes Soil gravelly and rocky 3 rd rate

Subdivision of T. 39 S. R. 10 W.

chains	No timber. Dense oak brush the whole distance Mountainous land 79.92 chs. May 17, 1899. at this cor. I set off 190 25' U. north decl. arc and at 114° 5' 6" A.M., I just observe the sun on the meridian; the resulting lat. is 37° 25' 30" N.
2630	N 0° 3' W bet. secs. 16 and 17 On mountainous land Ascending on steep rocky slope in dense Oak brush Top of round hill slope N. 280 ft above cor. and beginning of descent
3450	Bottom of slope bears E. and W. 120 ft below top of hill Enter rolling swale; slope E
4000	Set at Sandstone 18x10x6 in. 12 in in the ground for 1/4 sec. cor. marked 14000 W. face from which An oak tree 5 in. diam. bears N 16° 44' W. 39 chs. dist. marked 14 5 17 13. T.
	An oak tree 4 in. diam. bears S. 49° 15' E. 35 chs. dist. marked 14 5 16 13. T.
	Raised as mound of stones 2 ft. base 1 1/2 ft. high W. of cor.
4420	Road from Valley to Chrysalid Spring bears E. and W
4775	Dry wash 10 ft deep drains E.
	Begin steep ascent on S.E. slope Set at Sandstone 26x8x6 in. 18 in in ground and mound of stones 3 ft base 1 1/2 ft high on rocky bottom for cor. of secs. 8-9-16 and 17 marked with 4 notches on S and E edges. from which
8000	A juniper tree 11 in. diam. bears N 0° 5' E. 91 chs. dist. marked T 39 S 10 W 5 9 13. T.
	A pine tree 20 in. diam. bears N 26° 67' W. 1,33 chs. dist. marked T. 39 S. 10 W. 5. 8. 13. T.
	No other trees within limit Pits impracticable

Geological Survey of TORONTO

chain. This area shows the same
land conditions as suggested
soil gravity and rocky & soft
soil features. There is some
deciduous oak and some maple brush, dead
and alive.

Inconclusive land areas etc.

- (May 14, 1899 at 3⁴⁵ p.m., just off
37-26' 50" E. on the lot. area 19-37' 1" - bottom
deed-area and determined as tree-covered
with the colors at the corners 5-9-16 and 17
Please I send
5-19-52' 6 on a roadside bank, bet. 9 and 16
2000 feet long, no colors.
2290 Bottom. A and S. side 19 the S. of area of 9-
11-15 and 16
Please I send
West on a tree-line bet. 2000. 9 and 16
On inconclusive land
Lichenized on a cliff between S. slopes.
A spring solution basin, base 8. 5-5' 0" lbs. no dirt
the old square prairie coral 20 x 30 ft. base 8. 10'
about 100 lbs from spring.
dry wash in bottom of small course 5. 6. 100' H.H. 100' W.
Rocks which bottom out.
2292 Road front, Valley to Crystal Shores back roads.
3291 A stationary sandstone 48-48.2 ft above ground
for 40 miles, sand 16 on top, sand at
around of about 2 ft. base 15 ft length of one
etc. impossible
sharp brush 200' wide from 5 pm land of
spring 12 lbs. 10' H.H. 10' W.
The corner of area 9-9-16 and 17
This corner stands 200 ft. above the corner of area 9-
11-15 and 16
Land inconclusive very rough and
soil gravity and rocky & soft
soil features
Deciduous oak and some maple brush
Inconclusive land areas etc.

Subdivision of T 39 S 18 E 10 W.

chains	May 17, 1899
	May 18, 1899 At 7 th 25 th m. a.m., put S set off 37° 26' 30" N. on the lat. arc 19-36'. "N. on the decline and determine a true meridian with the solar at the cor. of sec. 8-9-16 and 17 thence Due N 0° 3' W. bel. sec. 8 and 9 On mountainous land Ascending on broken slopes in oak brush 19,00 Top of spur 160 ft. above cor. and beginning of descent on rolling surface 4,000 Set a sandstone 18 x 9 x 8 ins. 12 ins. in the ground for 1/4 sec. cor. marked 44° 00' W. face; raised a mound of stones 2 ft. base 1 1/2 ft high W. of cor. Pits impracticable 48,60 Bottom of draw obtaining E and beginning of gradual descent on rolling surface 8,000 Set a sandstone 18 x 10 x 7 ins. 12 ins. in the ground for cor. of sec. 4-5-8 and 9 marked with 4 notches on E. and 5 notches on S edges; raised a mound of stones 2 ft. base 1 1/2 ft. high W. of cor. — Pits impracticable Plain cor. stands 300 ft below top of spur Land mountainous high broken slopes soil rocky and gravelly 4 th rate No timber; Dense oak brush scattering about 3/4 of the distance Mountainous land 80.00 chs.
4,000.	East on a random line bel. sec. 4 and 9 Set bldgs. 1/4 sec. cor.
79,86	Intersect N. and S. line 10 lbs S. of cor. of sec. 3-4-9 and 10
	Thence Due
5,76	S 89° 5' 6" W. on a line bel. sec. 8, 9 and 9 On mountainous land Ascending in dense oak brush on N. E. slope Road from Valley to Crystal Spring branch

Subdivision of T. 39 S. 18. 10 W.

chains	N. and S
34,00	A small spring in a grove of birch bears S. 90 ltrs.: a tiny stream flows N. 75° E about 2 fms. and sinks
39,93	Set a sandstone 18 x 9 x 6 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 cor. N. face raised a mound of stones 2 ft. high N. of cor. Pill impracticable
59,30	Top of steep ascent bears N. and S. 700 ft. above cor.; enter rolling bench and gradual ascent
69,70	Bottoms of ravine drains N. 60° E and beginning of ascent to
79,86	The cor. of secs. 4-5-8 and 9 This cor. stands 830 ft. above the cor. of secs. 3-4-9 and 10 Land mountainous broken steep slope Soil gravelly and rocky 3rd and 4th ratio No timber Dense oak and birch brush Mountainous land 79,86 clos.— May 18, 1899 At this cor. I set off 19° 38' 30" S. on the decl. arc and at 1145' 6" a.m., first observe the sun over the meridian; the resulting lat. is 39° 24' N.
4,00	N. $0^{\circ} 3'$ W. on a random line bet. secs. 4 and 5 Set. comp. 1/4 sec. cor.
77,65	Intersect N. bdy. of Tk. 7 ltrs. st. of cor. of secs. 4-5-32 and 33 which is a stone firmly set marked and witnessed as described by the surveyor general Hence I run
	South on a true line bet. secs. 4 and 5— On mountainous land
	Ascending, no timber, and brush
3,90	Ditch 4 ltrs. wide claimed by Oliver DeMills course E
4,69	Fences belonging to same party bears E and W
8,00	Leave timber course E and W.
12,00	Top of steep slope bears E. and W. 160 ft.

Subdivision of T. 39 S 18 R. 10 W.

Station	above cor.
	Begins gradual ascent on rolling surface and N. E. slope
37,65	Set a sandstone 18 x 9 x 6 ins. 12 ins into the ground for 1/4 sec. cor. marked 1/4 and N. face: raised a mound of stones 2 ft base 1 1/2 ft high W. of cor. Pits impracticable Dry wash 12 ft deep course E J.H. Jennings cabin and coral bears E 1.00 chs.
49,45	The cor. of secs. 4-5-8 and 9
50,85	This cor stands 400 ft. above the cor. on N. bdy of Th
77,65	Land mountainous high broken slope Soil rocky and gravelly 3 rd and 4 th rate Timber pine and aspen of small size Dense oak, aspen and thorn brush, the whole distance Mountainous land 77.65 chs. —
	From the cor. of secs. 5-6-31 and 32 on S. bdy of Th I run N 0° 3' W. bet secs. 31 and 32 On mountainous land According, in timber, and undergrowth Top of ridge bears N. 60° W and S 60° E 200 ft above cor.
20,00	Begins descent on steep broken slope
24,00	Set a sandstone 18 x 11 x 8 ins. 12 ins into the ground for 1/4 sec. cor. marked 1/4 and N. face from which
40,00	A pine tree 18 ins. diam. bears N. 14° 32' W. 1.74 chs. dist. marked 1/4 S. 31 B. T. No other trees within limit. —
	Raised a mound of stones 2 ft base 1 1/2 ft high W. of cor. Pits impracticable Bottom of rocky cañon 230 ft deep course E
44,90	Begins ascent
51,40	Top of rocky spur E. 160 ft. high Descending to
70,00	Bottom of rocky cañon 300 ft below top of spur course S 75° E.

Subdivisions of T. 39 S. 19 T. 30 W.

chain 8,000	Ascending on steep even slope to set at limestone 18 x 7 x 6. ins. 12 ins. in the ground for cor. of sec. 29-30-31 and 32 marked with 1 notch on S. and 5 notches on E. edges from which A pine tree 18 ins. diam. bears S. 43° 20' W. 119 cm. dist. marked T. 39 S 19 T. 30 W. S 30 N. T. No other trees within limit Raised a mound of stones 2 ft. base 15 ft. high W. of cor. Pitt impractical This cor. stands 260 ft above bottom of cañon Land mountainous very rugged Soil rocky and gravelly 4 ft. rate Timber fine, piñon cedar and aspens scattering. Dense oak brush underground Mountainous land 80,000 chs.
	May 18, 1899.

4,000	May 20, 1899: at 7440 m a m, I went I set off 37° 24' N. on the lat. arc 20° 02' N. on the decl. arc. an determine a true meridian with the solar at the cor. of sec. 29-30- 31 and 32. Hence I run
7,988	East on a random line bet. sec. 29 and 32 Set tenth 1/4 sec cor. Marked it and 8 lines 12 ft. S. of cor. of sec. 28-29-32 and 33
3,000	Named Grand S 87° 5' 6" W. on a tree line bet. sec. 29 and 32 On Mountainous land Ascending in scattering timber and dense brush
3,100	Top of ridge course N. and S. Begin descent on broken slope
37.62	Edge of perpendicular sandstone break to Oak Creek cañon 250 ft. deep course S. 30° E. and N. 30° W. Oak Creek, 6 ft. wide, course S. 30° E. in bottom of narrow cañon Begin ascent

Subdivision of T. 39 S. 19. 10 W.

Chains	
39.94	Set. a sandstone 18x10x7 ins. 12 ins. inc the ground for 1/4 sec cor. marked 1/4 on N. face raised a mound of stones 2 ft base 15 ft. high ch. of cor. - Oil impracticable. -
43.20	Foot of perpendicular wall of cañon bears N.W. and S.E. 250 ft. high
43.37	Top of Cañon and beginning of steep ascent
76.50	Top of ridge bears S.70° E and N.70° W. Descending to
79.88	Top cor. of secs. 29-30-31 and 32 This cor. stands about 350 ft above the tip of the cañon Land mountainous very broken Soil rocky and gravelly sub-moderate Timber pine of fair size but thin scattering growth. - Dense oak brush Mountainous land 79.88 chs. -
	West bet. secs. 30 and 31 On mountainous land Descending gradually on S. slope On dense oak brush and scattering timber Bottom of gulch coarse S. Gr 125 ft below cor. Begin ascent on N. E. slope
145.0	Set. a sandstone 18x9x6 ins. 12 ins. inc the ground for 1/4 sec cor. marked 1/4 on N. face from which
40.00	A pine tree 15 ins. diam. bears S 74° 48' W. 62 Its dist. marked 1/4 S 31 B.T. A pine tree 16 ins. diam. bears S 49° 3' E Its dist marked 1/4 S 30 B.T.
79.00	Top of slope enter rolling plateau and gradual ascent
111.58	Begin descent
152.10	Bottom of gulch 60. ft. deep coarse N 30° E Begin ascent on broken slope
180.30	Foot of black lava break 40 ft high bears N 25° W. and S. 25° E. 6 chs. to front
180.36	Top of lava break; enter level plateau And heavily timbered land coarse parallel with break

Subdivision of T 39 S R 10 W

Claims

- 199,38 Intersect Kolob Guide Meridian and W. bdy
of this Tk at 16,90 dist. S of cor. of secs. 13 and
24 which is a black lava stone 26 x 10 x 8 ins.
set 20 ins. in the ground and marked with
3 notches on N. and S. edges; with a mound
of stones 2 ft. base 1 $\frac{1}{2}$ ft. high W. of cor.
Set a black lava stone 18 x 10 x 8 ins. 12 ins.
in the ground for closing cor. of secs. 30 and
31 marked C.C. on E. with 1 groove on S and
5 grooves on W. faces; raised a mound of
stones 2 ft. base 1 $\frac{1}{2}$ ft high E. of cor.
Pits impracticable. —

No trees of proper size within limit
This cor. stands 750 ft above the 14 sec. cor.
Land mountainous, rolling and level plateau
soil sandy rocky and gravelly 4th rate
Timber: fine in small bunches and scattering
On plateau large open forest
Dense oak brush undergrowth

Mountainous and heavily timbered land 199,38 tk.
May 20, 1899: The weather being cloudy
during the noon hour I could not observe
the sun on the meridian

N 0° 3' W. bet. secs. 29 and 30

On mountainous land

0.60 Ascending, in dense oak brush to
Top of ridge bears N 70° 9' and S 70° E
Enter timber and begin descent on broken
N. E. slope

40,00 Set a sandstone 24 x 8 x 6 ins. 18 ins. in the
ground for 14 sec. cor. marked 14 on W. faces,
from which

A fine tree 16 ins. diam. bears. S. 25° 5' E. 41 dist.
dist. marked 14 S. 29 B.T.

A fine tree 15 ins. diam. bears. N. 71° 56' W
95 lbs. dist. marked 14 S. 30 B.T.

50,50 Edge of perpendicular sandstone break
300 ft. deep to Canon of Oak and Kolob
Creeks which join here; and further

Subdivision of T. 39 S. 1 P. 10 W.

Chains	Chainimg. is impossible I therefore set a flag on line and measure off a baseline S. $89^{\circ}57'W.$ 17,000 chs to a flag - Must go to a point on the opposite side of cañon where flag on line at $50^{\circ}50'$ bears $80^{\circ}3'E.$ and flag at w. end of baseline bears $S.33^{\circ}41'W.$ Therefore tan. $33^{\circ}44' \times 17,000 =$ $25,47 + 50,50 =$
75.97	N. E. edge of cañon 300 ft. deep. bears N $30^{\circ}W.$ and S. $30^{\circ}E.$ - A stream 12 chs. wide flows S. E. in bottom of cañon about midway between wall; and a few feet S. E. of junction of Holob and Oak creeks. Leave timber and ascend gradually in dense undergrowth-
8000	Set a red sandstone 18 x 8 x 7 ins. 12 ins. in the ground for cor. of secs. 19-20-29 and 30 marked with 2 notches on S and 5 notches on E. edges raised a mound of stones 2 ft. base $1\frac{1}{2}$ ft. high W. of cor. Pile impracticable This cor stands 6,30 ft. below the cor. of secs. 29-30-31 and 32 Land mountainous very rugged Soil gravelly sandy and rocky & gravelly Pinebois pine of large size and open growth - Dense oak brush and thorn undergrowth Mountainous land and dense undergrowth - 8,000 chs. -
	May 20. 1899
May 21. 1899 I run N $89^{\circ}55'E.$ on a random line bet. secs. 20 and 29	
4,000	Set comp. 1/4 sec. cor.
79.96	Intersect N. and S. line at cor. of secs. 20-21-28 and 29 There I run
	S $89^{\circ}6'5'W.$ on a true line bet. secs. 20 and 29 On mountainous land
17,000	Ascending in dense brush and scattering timber Top of spur N. 130 ft above cor. Begin descent
275.2	Bottom of gulch convex S. $55^{\circ}W.$ 125 ft deep

Subdivision of T 39 S 1810 W.

	chainin	Ascending to
3645		Top of spur S 100 ft high and beginning of descent
3998		Set a sandstone 26x10x6 ins. 19 ins. in the ground for 1/4 sec cor. marked 1/4 and N. face raised a mound of stones 2 ft base 1 1/2 ft. high N. of cor. Pit impracticable
44,00		Bottom of gulch 200 ft. deep course S. 57°0' E to S. 34°
		Begin ascent
55,00		Top of spur S. 100 ft. high
		Descend to
71,92		Bottom of gulch 160 ft. below top of spur course S. 34°
		Begin gradual ascent
		Leave timber
76,30		Top of spur S. and beginning of descent to
79,96		The cor. of sec. 19-20-29 and 30
		Land mountainous very broken
		Soil gravelly and rocky 4 ch. rate
		Timber, pine juniper and cedar scattering
		Dense oak brush undergrowth
		Mountainous land 79,96 chs. -

May 21. 1899 At 9 410 m a.m., I set off 37° 24' 30" N. on the lat. arc 20° 46' 30" N. on the decl. arc and determine a true meridian with the solar at the cor. of sec. 19-20-29 and 30
Thence 0 run

West bet. sec. 19 and 30

On mountainous land.

Descending gradually in dense brush
Edge of perpendicular sandstone break in Oak Creek
Canyon 300 ft. deep course N. 15° W and S. 30° E
and further chaining is impossible; I therefore return to the cor. of sec. 19-20-29 and 30
and plant a flag at said cor. and measure
W baseline 42.00 chs. North to a flag. - I
now go to a point on W. side of canyon.
where flag at sec. cor. bears East.
and flag at N end of base bears N 16° 57' E
base not an 73' 3" X 12.00... = 12.80.

Top of W. side of canyon. and the most easterly point on line which can be approached

Subdivision of T. 39 S. R. 10 W.

- chains owing to perpendicular breaks of great depth
course N 10° W and S 10° E. - Oak Creek about 4 miles
wide flows S 10° E about center of canon
Begin ascent in scattering timber
- 38.00 Top of slope bears N. and S. 200 ft above canon
There are rolling plateau and gradual ascent
40.00 Set a sandstone 18x9x7 in. 12 in in the ground for 14 sec cor.
marked W.north. face raised a mound of stones 2 ft base 1 $\frac{1}{2}$ ft high
N. of cor. - Pili impracticable
This cor. stands 360 ft above edge of canon
- 51.00 Enter heavily timbered land course N and S.
108.70 Begin descent on broken slopes to
118.70 Bottom of gulch course S E 100 ft. deep
Descending to
152.00 Top of black lava spur S 30° E ft
Leave heavily timbered land course S and S
Begin descent on SW slope in bed of large
lava boulders
169.52 Kolob Creek 5 lks. wide course S E
Begin ascent
179.20 Intercept Kolob Guide meridian and w. bdy
of Tp at 16.82 chs. S of cor. of sec. 12 and 13
which is a black lava rock 30x12x7 in.
reb. 24 in. in a mound of stones 3 ft.
base 2 ft high on rocky bottom in lava
bed, and marked with 2 notches west and 4
notches on S. edges. -
Set a black lava rock 20x9x6 in. 18 in. in
ground and rock for closing cor. of sec. 19
and 30 marked C.C. on E. with 2 grooves and
Sand 4 grooves on N faces. raised a mound
of stones 2 ft. base 1 $\frac{1}{2}$ ft. high E. of cor.
Pili impracticable. -
- Lands mountainous very broken
Soil rocky and gravelly 4th rate, and
barren rock on lava slide
Timber: pieces of fair size but few growths
Dense undergrowth of oak brush and stone
Mountainous and heavily timbered lands
199.20 chs. -
- May 21, 1899 The sky being overcast during

Subdivision of T. 39 S. 18. 10 W.

Distance	The more hours I was unable to observe cleared over the meridian
	N 0° 3' W. bet. secs. 19 and 20 On mountainous land Ascending in dense brush
3,000	Entered timber course N.W. and S.E. Leave timber course E and W.
15,000	Thened on W slope and gradual broken ascent to
40,000	Set a limestone 18x10x8 ins. 12 ins. in the ground for. 1/4 sec cor. marked "Now W. face raised a. mound of stones 2 ft base 1 1/2 ft high W of cor. Pit impracticable
54,000	Tops of spurs W. 300 ft above sec cor. Begin descent
66,000	Bottom of ravine course S.W. 200 ft deep. Ascending to
77,900	Tops of spurs S.W. 230 ft. high Begin descent on broken slope
- 80,000	Set a limestone 28x9x6 ins. 21 ins. in the ground for cor. of secs. 17-18-19 and 20 Marked with 3 notches on S. and 6 notches on E. edges from which. A pine tree 17 ins. diam. bears. S 66° 10' W. 45' like dist. Marked T 39 S 18 10 W S 19 B.T. A pine tree 13 ins. diam. bears. N 58° 31' E 107 like dist. marked T 39 S 18 10 W S 17 B.T. No other trees within limit Raised a mound of stones 2 ft base 1 1/2 ft high W. of cor. Pit impracticable This cor stands on steep S. slope in slide rock Land mountainous very rugged soil gravelly and rocky 4th rate Timber pine pinon and cedar scattering Dense oak brush, undergrowth - Mountainous land 8,000 ft. -
	May 21, 1899.

May 22, 1899 I run

N. 89° 53' E. on a random line bet. secs. 19 and 20

Subdivision of T 39 S R 10 W.

209

Altitude	
4,000	Set being 1/4 sec. cor.
8,000	Intersect N. and S. lines 18 00s & of cor. of secs. 16 17-20 and 21
	Hence spur
	N 89° 57' W. on a base line betw. secs. 17 and 20
	Ascending gradually in S. slope in dense oak brush
11,000	Top of spur S. and beginning of descent
23,500	Dry wash courses S 200 ft. below spur
	Begin ascent
3,000	Top of spur S. 50 ft high
	Begin descend to
4,000	Set at sandstone 18 x 7 x 6 ins. 12 ins. in the ground for 1/4 sec. cor. marked 4,000 N. face! raised a mound of stones 2 ft. base 1 1/2 ft. high ch. of cor. Pitti impenetrable
40,85	Bottom of gulch 210 ft deep course S 30° E
	Begin ascent to
68,75	Top of ridge course N and S 250 ft above gulch.
	Begin descent in scattering timber
8,000	The cor. of secs. 17-18-19 and 20
	This cor. stands 180 ft below top of ridge
	Land mountainous very rugged
	Soil gravelly and rocky 4 grade
	Timber, pine and juniper scattering
	Dense oak brush undergrowth
	Mountainous land 8,000 chs. —
12,60	West bet secs. 18 and 19
	On mountainous land
	Descending, in scattering timber and dense brush undergrowth.; on steep W. slope
	Bottom of ravine course S 65° W. 200 ft below cor.
	Begin ascent
32,70	Top of spur S.W. 120 ft high
	Descending to
4,000	Set at sandstone 18 x 9 x 8 ins. 12 ins. in the ground for. 1/4 sec. cor. marked 4,000 N. face! raised a mound of stones 2 ft. base

Subdivision of T 39 S 18 E W.

chain	14 ft. high N of cor. - Pili impracticable
40.45	Edges of canon bears N.W. and S.E. a perpendicular sandstone break, 200 ft. deep.
44.60	Dash Creek 5 lbs. wide course S E Begin ascent
51.00	Top of canon and beginning of ascent on broken N. E. slope Land scattering timber
94.50	Begin descent
126.46	Bottom of ravine 200 ft. deep course N E Descending
192.50	Top of ridge bears N and S. about 600 ft. above top of canon
	Begin descent
198.96	Entered Kolob Guide Meridian and N. bdy of this Tp. 16, 74 chs. S. of cor. of secs. 6 and 12 which is a sandstone firmly set marked and whitened as described by the surveyor general Set a sandstone 18x 9x 6 ins. 12 ins. in the ground for closing cor. of secs. 18 and 19 marked C.C. on E with 3 grooves on S. and N. faces; raised a mound of stones 2 ft. base 1½ ft. high E. of cor. - Pili impracticable Land mountainous very broken soil gravelly and rocky 3rd rate - Timber pine, juniper and cedar scattering Dense tall brush of oak and maple the whole distance Mountainous land 198.96 chs. - May 22. 1899 At this cor. I set off 20° 28' N. on the decl. arc and at 111° 56' a.m. I set observe the sun on the meridian! the resulting int. is 37° 26' 30"

May 22. 1899. At 2 1/4 m p.m., I set off
37° 25' 30" N. on the lat. arc 20° 29' N. on the
decl. arc and determined a true meridian with
the solar at the cor. of secs. 17-18-19 and 20
Since I need
N 0° 3' W. lat. secs. 17 and 18

Subdivision of T. 39 S. 11. 10 W.

drain	On Mountainous land Descending in scattering timber
2,00	Bottom of steep narrow ravine conc. N. Begins abrupt ascent
10,75	Top of spur S. 75° W. 260 ft above ravine Begins descent on bottom W. slope
40,00	Set on sandstone 26 x 9 x 6 in. 19 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face from which A cedar tree 20 ins. diam. bears N 55° 48' W 9.3 lbs. dist. marked 1/4 S 18 B.T. No other trees within limit Raised a mound of stones 2 ft base 1 1/2 ft high W. of cor. - Pith impracticable
40,49	Bottom of ravine 130 ft deep drains S. W. Ascending. Leaves timber conc. N. E. and S. W.
63,00	Top of ridge conc. S. W. and N. E. 225 ft above ravine Hence on gradual descent to
66,10	Bottom of ravine draining S. W. and beginning of gradual ascent to
8,000	Set on sandstone 18 x 11 x 6 in. 12 ins. in the ground for cor. of sec. 7-8-17 and 18 marked with 4 notches on S. and 5 notches on E. edges: raised a mound of stones 2 ft. base 1 1/2 ft. high W. of cor. Pith impracticable This cor. stands 600 ft. above the cor. of sec 17-18-19 and 20 Land mountainous broken slope Soil rocky and gravelly 4 th rate Timber; pine, pinon and cedar scattering Mountainous land 80,000 acs. —
40,00	S. 89° 57' E on a random line bet. secs. 8 and 17 Set cor. 1/4 sec. cor.
80,14	Intersect N. and S. line 7 lbs. S. of cor. of sec. 8-9-16 and 17 Hence I now
	N. 89° 54' W. on a line bet. sec. 8 and 17
	On mountainous land
	Descending on steep broken slope

Subdivision of T 39 S 1810 M.

	Clarice	
29.50		Top of south end of Kolob Mountain course + 26° N and S 25° E. 400 ft above cor.
		Begin descent
40.07		Set a sandstone 26 x 9 x 6 in., 19 in. in the ground for 14 sec. cor. marked 14 on st. face; raised a mound of stones 2 ft base 1½ ft. high N. of cor. Pits impracticable
46.90		Road from Valley to Clarice Spring bears N. W. and S. E.
57.15		Head of ravine draining S. 490 ft below top of mountain
		Second h.
64.00		Top of ridge bears N and S 30 ft above cor. and begins descent on rolling S.W. slope to
80.14		The Cr. of sec. 7-8-17 and 18 Land mountainous very rugged Soil gravelly and rocky 40% rate No timber. - Mountainous land 80 ft above cor. -
		May 22, 1899

		May 23. 1899 at 7428 m a.s.t. set off 27°26' 30" N. on the lat. and 200°38' W. on the decl. and determined a true meridian with the Polar at the cor. of sec. 7-8-17 and 18' then I run
		West bet. sec. 7 and 18
		On mountainous land
		Descending on rolling slope
39.08		Bottom of gulch 300 ft below cor. course S 10° W.
		Begin steep ascent
46.00		Set a sandstone 18 x 9 x 6 in., 12 in. in the ground for 14 sec. cor. marked 14 on st. face raised a mound of stones 2 ft base 1½ ft. high N. of cor. - Pits impracticable
44.24		Top of spur 5100 ft above gulch and beginning of descent W
99.10		Oak Creek in bottom of rocky ravine 150 ft deep and 500 ft. below top of spur 5 like wide rapid current course S. E.

Subdivision of T 39 S 11 W.

Station	Begin steep broken ascent
195,00	Top of ridge bears N. and S. 72° E. above creek Begin descent to
198,77	Intersects Holob Guide Meridian and W. bdy of T.P. 16, 60 chs. S. of cor. of T.P.s. 38 and 39 S. R. 11 W which is a sandstone finely set and marked with 6 notches on S. W. and N. edges. Set a Sandstone 21x8x5 ins. 16 ins. in the ground for corner of secs. 7 and 18 marked E. C. on E. with 2 grooves on it and 4 grooves on S. faces; raised a mound of stones 2 ft. base 1½ ft. high E. of cor. - Pits impracticable Land mountainous very rugged. Soil gravelly and rocky 4:1 ratio No timber. - Dense oak and scrub brush Mountainous land 198.77 chs. - May 23, 1899 at this cor. I set off 20° 40' " N. on the decl. arc and at 11456 m a m. I went observe the sun on the meridian: the resulting lat. is 37° 26' 30" N.

4,000	N 0° 3' W. bet. secs. 7 and 8 On mountainous land Ascending on broken S.W. slope bet. oak brush Set a sandstone 15x9x7 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 now N. face raised a mound of stones 2 ft. base 1½ ft. height N. of cor. Pits impracticable
40,66	Road from Valley to Crystal Spring bears N. W. and S. E. at foot of main mountain slope running parallel with road
8,000	Begin ascent on steep rocky and broken slope Set a sandstone 18x10x6 ins. 12 ins. in the ground for cor. of secs. 5-6-7 and 8 marked with 5 notches on S. and E. edges; raised a mound of stones 2 ft. base 1½ ft. high W. of cor. Pits impracticable This cor. stands 600 ft above the road and 780 ft above the cor. of secs. 7-8-17 and 18 on W. slope Land mountainous broken slope

Subdivision of T 39 S R 10 W.

chain	Soil gravelly and rocky 4 th rate - No timber. Mountainous land 8,000 chs. -
4,000	S 89° 5' 4" E. on a random line bet. sec. 5 and 8 Set limits $\frac{1}{4}$ ac. cor.
5,006	Intersect N and S. line 16 chs S of cor. of recs 4-5-8 and 9
	Hence I run
	S 89° 5' 9" W. on a true line bet. sec. 5 and 8 On mountainous land
4,003	According in steep rocky slope in dense oak brush Set a sandstone 18 x 10 x 6 in. 12 in in. the ground for $\frac{1}{4}$ rec. cor. marked $\frac{1}{4}$ cor. N. face raised a mound of stones 2 ft base 1 $\frac{1}{2}$ ft high N of cor. Pitt impracticable
	This cor. stands on top of Kolob mountain 8.70 ft above the cor. of recs. 4-5-8 and 9 On the north is a rolling plateau on the south a spur breaks gradually to a narrow ridge A horse. coral claimed by J. S. Berry 200 ft diam. in the head of a ravine draining N 60° E. and by a small spring, bears N 18° 10' W 25,00 chs.
4,100	Begins gradual descent
4,460	Perpendicular sandstone break 30 ft deep bears N. 60° W. and S. 60° E.
6,553	Hence on rocky broken S.W. slope Top of perpendicular sandstone break 40 ft deep bears N., and S. 75 chs to E.
-	Begins descent on steep rocky W. slope to the cor. of recs 5-6-7 and 18.
8,006	This cor. stands 575 ft below the $\frac{1}{4}$ rec. cor. Land mountainous very rugged Soil rocky and gravelly 4 th rate - No timber.
	Some oak brush on E side of mountain Mountainous land 8,006 chs. -
	May 23, 1899
	May 24, 1899 I run

Subdivision of T 38 S R 10 W.

chain	West. bch. secs 6 and 7 On mountainous land Descending on steep rocky slope N. in dense oak brush
1545-	Bottom of narrow gulch 490 ft below cor. course S.- Begin broken ascent
4,000	Set w black lava rock 18 x 9 x 7 in. 12 in. in the ground for 1/4 sec. cor. marked 1/4 on N. face; raised a mound of stones 2 ft base 1 1/2 ft. high N. of cor. Pile impracticable
4,350	Top of spur S. 570 ft above gulch and beginning of descent on broken slope
9,600	W. Spring 20 chs. diam. draining S. on east side bears S. 13.00 chs.
121.26	Fence bears N.E. and S. w. 150 cm enter Mrs Spendlove pasture
121.50	Road from Valley to Crystal Spring bears parallel with fence
123.45-	Fence bears N.W. and S.E. bears pasture
126.60	Road from Valley to Crystal Spring bears N. 60° E. and S. 60° W. same road as above Enter timber course parallel with road
130.95-	Spring branch 3 chs. wide from Oak Spring in bottom of open gulch known as Oak Valley; course S. 20° E. - about 500 ft below top of spur Begin ascent on rolling slope
143.00	Homed of Mrs Spendlove bears North - 21,80 chs. Oak Spring is located about one chain W. of the house 10 ft diam discharging a stream of excellent water 4 chs wide; on the E. of house is about 3 acres in cultivation. - an irregular fence encloses house, spring and 50 to 60 acres of land, mostly steep rocky hillside. - This is known as Oak Valley Ranch
189.62	Road from Valley to Oak Valley and Crystal Spring bears N. E. and S. W.
198,88	Intersect Kolob Guide Meridian and N.W. bdy of Th. at 16,34 chs. S. of cor. of sec. 25 and 36 T 38 S R 11 W. which is a stone firmly set marked and witnessed as described by the surveyor general. - Set in sandstone 18 x 9 x 7 in. 12 in. in the ground for closing cor. of sec. 6 and 7 marked

Subdivision of T. 39 S. R. 10 W.

Chains	C.C. on E with 1 grove on it and 5 groves on S. faces; raised a mound of stones 2 ft base 1½ ft high E of cor. Pits impracticable Plates of prosed size within limit Thin cor. stands on E slope 425 ft above spr. branch Land mountainous very rugged Soil rocky and gravelly 3 rd and 4 th rate Timber, oak and aspen of small size, but so large to designate as brush. Dense oak brush the whole distance Mountainous land 198,88 chs. — May 24, 1899: The weather being cloudy I could not observe the sun on the meridians
44,00	N. 0° 3' W. in a random line bet. recs. 5 and 6. Set lemp. ¼ sec. cor.
77,19	Intersection N. bdy of T. p 44 Chs. N. of cor. of recs. 5-6-31 and 32 which is a stone formerly set marked and witnessed as described by the surveyor general: — Thence Due
50,19	S. 0° 16' W. on a tree line bet. recs. 5 and 6 On mountainous land Ascending on broken rolling plateau
37,19	Set a sandstone 18 X 10 X 6 ins. 12 ins. in the ground for ¼ sec. cor. marked ¼ on W. face; raised a mound of stones 2 ft base 1½ ft high W. of cor. Pits impracticable. —
40,20	E. of steep rocky descent in head of ravine bears E. and N. 200 ft above sec. cor.
72,80	Descent becomes gradual on W. slope.
77,19	The cor. of recs. 5-6-7 and 8 Thin cor. stands 7.50 ft below the top of plateau Land mountainous very rugged. Soil gravelly and rocky 4 th rate No timber. — Aspen brake in scattering patches Mountainous land 77,19 chs. —

May 24, 1899: Near my camp in sec. 6 T. 39 S R. 10 W. about 1,600 chs. N. of the S. bdy of said sec.

Subdivision of T 39 S 11 E 10 sec 11

claims

I examine the adjustments of the transit and correct the level and collimation errors; then to test the solar apparatus by comparing its indication resulting from solar observations made during a.m. and p.m. hours with - a true meridian determined by observation on Polaris I proceed as follows.

At 44° 55' m. p.m. 2nd I set off 37° 27' N. on the lat. arc 20° 5' N. on the decl. arc and determine a true meridian with - the solar, marking a point thereof on a stake firmly set in the ground 500 dm. N. of my station.

At 94 11m p.m., 2nd I observed Polaris at lower culmination in accordance with Manual of Instructions and mark a point in the true Meridian thus determined on the stake previously set 500 dm. S. of the instrument.

May 24, 1899

May 25, 1899. At 7⁴ 31 m. a.m., 2nd I set off 37° 27' N. on the lat. arc 21° 0' N. on the decl. arc and mark a point in the true meridian determined by the solar on the stake set May 24, 1899 at 500 dm. S. of my station. The true meridians determined by p.m. and a.m. solar observations agree respectively within 1' with the true meridians determined by observation on Polaris and I therefore conclude the adjustments of the instrument are satisfactory. —

May 25, 1899

General Description

This township is all mountainous land and with the exception of sec. 22 and a small part of sec. 21 is too stony, rugged and rocky for cultivation excepting possibly a few isolated patches of an acre or two. —

The soil is rocky, gravelly and sandy but used to furnish good summer pastures but now owing to drought and over stocking it is denuded of all but brush and weeds.

Subdivision of T. 39 S.R. 10 N.

The land will not produce crops without irrigation.—

There is very little timber of value within the township; some fair sized pine forest exist in the southern part but it is inaccessible on account of deep canons.—

The northern portion of the township is probably underlaid with valuable deposits of coal outcropping of which can be seen in several places. — There are no other minerals within the township.—

There are several streams of good water traversing the township but all are found in the bottom of deep rocky canons and hard of access.—

There is one settlement in sec. 6 the other settlements are used for summer grazing only. —

I return secs. 4-5-6 $\frac{1}{2}$ of sec. 7, sec. 8-9 and 17 as coal lands. —

Andrew P. Hanson
U.S. Dep't Surveyor

Resurvey of Hobbs Guide line

chain	May 19, 1899 From the vertices cor. 61 cor. of Tps. 39 and 40 S. 10 and 11 W. set 5.00 cm. N. rail cor. and vertices in a line firmly set marked and witnessed as described by the surveyor general: and which I do hereby swear.
8,000	East. sec. 1 and 36 On mountainous land Descending in dense oak brush on rocky, rolling, high 5.00 cm. to
X 500	Set a black lava rock 18 x 10 x 7 in. 12 in. in the ground for cor. of Tps. 39 and 40 S 10 and 11 W. marked T 39 on N.W., R. 11 W. on S.W. with a notch on N. and W. edges raised a mound of stones 2 ft base 1 1/2 ft high. W. of cor. Rail imperceptible Land mountainous very broken slight slope soil rocky 4th rate Timber a few pine trees scattering Dense oak brush undergrowth Mountainous land 5.00 cm.
4,009	From the cor. of Tps. 39 and 40 S R. 11 W. I run North on a random resurvey line setting 14 sec. and sec cor. at intervals of 40.00 cm and at 4 m 79.40 cm. Intersect the cor. of secs. 1-6-7 and 12 from which, continuing my course at 80.18° I intersect the cor. of Tps. 38 and 39 S 10 and 11 W. which is a line firmly set marked and witnessed as described by the surveyor general.- obliterating from above described cor. of Tps. 38 and 39 S 10 and 11 W. all markings pertaining to R. 10 W. I run, on resurvey line South on E. bdy sec. 1. On mountainous land On rolling surface and W. slope in dense oak brush No trace of the 14 sec cor. could be found therefore Set a sandstone 18 x 10 x 6 in 12 in. in the ground for 14 sec cor. marked W. of N. face; raised a mound of stones 2 ft base 1 1/2 ft high S. of cor. Rail imperceptible
80.18	The cor. of secs. 1-6-7 and 12 which is a

Resurvey of Kolob Guide Meridian

	<p>claims sandstone perfectly marked lying on the ground and which I recd 12 in. deep. 6 in. above surface and raised a mound of stones 2 ft base 1½ ft. high W. of cor. Pit impracticable I obliterate all markings pertaining to sec. and land mountainous broken slope Soil gravelly 3rd rate no timber Dense oak brush undergrowth Mountainous land 80.18 chs. —</p>
39.94	<p>South on E bdy recd 12. On mountainous land On rolling no slope through oak brush No trace of the 44 sec. cor. could be found. Set a sandstone 18×9×6 in. 12 in. in the ground for 44 sec. cor. marked 44 on W. face raised a mound of stones 2 ft base 1½ ft high W. of cor. Pit impracticable</p>
68.50	<p>Perpendicular break of lava rock 60 ft deep. bear N 70° W and S 85° E : enter well of large lava fragments and steep descent</p>
78.00	<p>Kolob Creek 5' dia wide in narrow channel crossed S. 65° E</p>
79.88	<p>Begin ascent on large boulders and fragments Set a black lava rock 28×12×8 in. 24 in. in a mound of stones 3 ft base 2 ft high for cor. of sec. 12 and 13 marked with 2 matches on N. and 4 matches on S. edges. Pit impracticable Land Mountainous very broken Soil gravelly and rocky 4th rate No timber Dense oak brush in patches Mountainous land 79.88 chs. —</p> <p>A careful search was made for the witness cor. within cor. set 19.80 chs. st. but no trace of it could be found within a radius of 4 chs. of its proper place May 19. 1899. at this cor. I set off 19.57° N on the decl. arc. and at 1145th a.m. I m^t observed the sun on the meridian the resulting lat is 37° 25' N.</p>

Survey of Kolob Guide Meridian

	South on E. bdy. sec 13 On mountainous land Ascending gradually in huge boulders and fragments of black lava, on E-slope about 8' clu. E. of break running parallel to line
3,994	Set a black lava rock 30x11x6 in. 24 in in a mound of rock 8 ft base 2 ft high for 1/4 sec. cor. marked 1/4 sec W. face: Pitt impracticable
79,88	Set a black lava rock 28x10x6 in. 21 in in ground and around of stones on rocky bottom for cor. of secs. 13 and 24 marked with 3 notches on N. and S. edges; raised a mound of stones 2 ft base 1 1/2 ft high W. of cor. Pitt impracticable Land mountainous very rugged soil barren rock - lava slide Timber a few scattering pine and aspen trees No undergrowth - Mountainous land 7988 clu. A careful search was made for the witness cor. in this cor. set 23,000 clu. w. but no trace of it could be found nor the witness cor. in the 1/4 sec. cor. set 40,000 clu. S. of it -
2,00	South on E. bdy. sec. 24 On mountainous land On E-slope in huge lava boulders, and timber Head of draw running N. 60° E
12,25	Begin ascent on N.E. slope Top of lava bed bears N 75° W and S 75° E 150 ft above cor. Entered lava plateau
32,00	Edge of lava break 80 ft. deep course E. and W. Leave plateau and begin abrupt descent in lava boulders
39,94	Set a lava rock 30x11x7 in. 24 in in a mound of stones 3 ft. base 2 ft high on top of flat lava boulder 10 ft. wide for 1/4 sec cor. marked 1/4 on W. face: - Pitt impracticable
6610	Dry wash and channel of Blue Spring Creek course S. 5° E. 450 ft. below break Then W. on E-slope, broken gradual descent

Survey of Kolob Guide Mountain

Chain = 79.88	<p>Set a black lava rock 2.8 x 1.2 x 6 in. 1.2 m. in ground and around of stones on rocky surface for cor. of recs. 24 and 25 marked with 4 notches on N. and 2 notches on S. edges raised a mound of stones 2 ft. base 1/2 ft. high W. of cor Pili impracticable.</p> <p>Land mountainous very broken</p> <p>Soil rocky - barren rock mainly.</p> <p>Timber fine of open thin growth and aspens groves of small growth.</p> <p>Mountainous land 79.88 chs. -</p> <p>The witness cor. in thin cor. I found as described by the surveyor general at 27.32 chs. W. and destroyed, the witness cor. in the 114 sec. cor. not 40.00 chs. W. of it could not be found after diligent search. —</p> <p>S. 11, E. 66</p>
3,000	<p>May 19, 1899. At 4⁴⁵ p.m., I met Ord off 37° 23' N. on the lat. arc. 19° 54' E. N. on the decline and determine a true meridian at the cor. of recs. 24 and 25 — Prince Creek</p> <p>South on E. bdg. rec. 25 —</p> <p>On mountainous land</p> <p>Descending gradually on steep E. slope in large lava boulders. —</p> <p>Bottom of draw, draining E. and beginning of gradual ascent on steep E. slope</p> <p>Level land bed curved E. and N. —</p>
39,94	<p>Set a lava rock 18 x 1.2 x 8 in. 1.2 m. in the ground for 114 sec. cor. marked 14 on N. face raised a mound of stones 2 ft. base 1/2 ft. high W. of cor. Pili impracticable.</p>
79.88	<p>Set a sandstone 18 x 1.1 x 7 in. 1.2 m. in the ground for cor. of 200, 25 and 36 marked with 5 notches on N. and 1 notch on S. edges raised a mound of stones 2 ft. base 1/2 ft. high W. of cor. Pili impracticable.</p> <p>Land mountainous very rugged</p> <p>Soil rocky - mainly barren rock</p> <p>No timber —</p>

Book A-200

Resurvey of Holob Guide Meridian

chain	Dense oak brush undergrowth - Mountainous land 79,88 chs. - The witness cor. to this cor. I found as described by the surveyor general at 33,75 chs cor. and destroyed. The witness cor to the 1/4 sec. cor. set 4,000 chs st. if it could not be found though. a diligent search was made for it
39,94	South. on E. side sec. 36 On mountainous land Ascending gradually on E. slope, in dense oak brush and a few scattering trees Set of Sandstone 18 x 10 x 8 in. 12 in. in the ground for 1/4 sec. cor. marked 1/4 on N. face; raised a mound of stones 2 ft. base 1 1/2 ft. high N. of cor. Pits impracticable. - The witness cor. to this cor. set 17,000 chs. w. could not be found though a diligent search was made for it
48,50	Top of slope and spur to 350 ft above cor. and beginning of descent on S. E. slope to
79,88	The cor. of Tps 39 and 40 S R 11 W. Land mountainous very broken Soil rocky and gravelly 4th rate - Timber. a few scattering pine trees Dense oak brush undergrowth - Mountainous land 7988 chs. -

May 19, 1899

Andrew P. Stansard

U. S. Dep Surveyor.

Note: The Manual, Page 179, states that field notes
of resurveys must be incorporated with the
fieldnotes of the subdivisions to which they
directly relate, and I had no knowledge of
the fact that it is now required to furnish
separate affidavits and oaths for resurveys; -
and therefore I did not make oaths made
until my assistants are reatferred and in case
over their address unknown to me and it would
now be difficult to obtain them. -

Andrew P. Stansard

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30

Final Oaths of Deputy Surveyor and his Assistants.

LIST OF NAMES.

A list of the names of the individuals employed by _____

, United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of _____

showing the respective capacities in which they acted:

_____, Chainman.

_____, Chainman.

_____, Moundman.

_____, Moundman.

_____, Axman.

_____, Axman.

_____, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted _____

, United States Deputy Surveyor, in surveying all those parts or portions of the _____

and _____ of the base
and _____ meridian, _____ of _____, which are represented
in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor General for _____

_____, Chainman.

_____, Chainman.

_____, Moundman.

_____, Moundman.

_____, Axman.

_____, Axman.

_____, Flagman.

Subscribed and sworn to before me this _____
day of _____, 189 _____

SEAL

Final Oath of United States Deputy Surveyor.

I, , United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from United States Surveyor General for , bearing date of the day of , 189 , I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for , the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of

..... of the base and meridian, in the of , which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey; and should any fraud be detected, I will suffer the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

United States Deputy Surveyor.

Subscribed by said , and sworn to before me this }
..... day of , 189 }

600000
650000
600000

APPROVAL.

Office of the United States Surveyor General,

Valhalla, N.Y. May 5th 1900, 480

The foregoing field notes of the survey of the 1st division of North Platte Survey
of Frederick Gengenberger 10 Dots of the South Park Base
for Deedbase, etc.

executed by

Claude J. Harvey

under his contract No. 210, dated Oct 1st 1898, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Jacob H. Blair
United States Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in , has been correctly copied from the original notes on file in this office.

.....

United States Surveyor General.

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BOOK A-256

FIELD NOTES

H. J. B.

OF THE SURVEY OF

*Subdivision Lines**of**Township 39 South Range 11 West*

Of the Salt Lake Base and Meridian,

Utah

AS SURVEYED BY

Andrew P. Hansen, United States Deputy Surveyor,

Under his Contract No. 220, dated April 1, 1898

Survey commenced May 25, 1898

Survey completed May 26, 1898

6-161

Subs. freight m. chs. etc. 4-40-00 ✓

Names and Duties of Assistants.

Henry E. Giers - - - - - Disinventor

Thomas E. Lyons - - - - - "

Henry E. Giers - - - - - Memorandmaw

Joseph Bryant - - - - - "

Joseph Bryant - - - - - Axman

Edward H. Parry - - - - - "

Edward H. Parry - - - - - Flagman

John Gardell Axman or "

For preliminary affidavets see books 6 & 11

BOOK A-256

INDEX DIAGRAM.

Township _____, *Range* _____

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

Meanders Page _____

Preliminary Oaths of Assistants.

WE, _____ and _____
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of _____

_____, Chainman.

_____, Chainman.

Subscribed and sworn to before me this _____
day of _____, 189 } }



WE, _____ and _____
do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of _____

_____, Moundman.

_____, Moundman.

Subscribed and sworn to before me this _____
day of _____, 189 } }



WE, _____ and _____
do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey of _____

_____, Axman.

_____, Axman.

Subscribed and sworn to before me this _____
day of _____, 189 } }



I, _____, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of _____

_____, Flagman.

Subscribed and sworn to before me this _____
day of _____, 189 } }



Subdivision of T. 39 S. R. 11 W.

Claim

Survey commenced May 25, 1899 and executed with a Gurley light mercurial transit with solar attachment. - The horizontal limb is provided with two double verniers placed opposite to each other reading to single minutes of arc which is also the least count of the verniers of the horizontal and declination axes. - The instrument was examined, tested on the true meridian at Salt Lake, found correct and was approved by the surveyor general for Utah Decr. 23, 1898.

For examination of adjustments and completeness of solar apparatus concluded this day second of field notes of subdivision lines T. 39 S. R. 11 W. reference to which is hereby made. See book #4.

Note: The unexecuted part of S. bdy. and W. bdy. of this T.p. falls in the L. V. broken broken and cannot be surveyed by ordinary methods. To set the cor. on said lines or on offset lines within allowed limits would require a month of blasting of granite, and necessitate the use of ropes and other devices at great expense and is therefore impossible within this contract. -

It being impossible to run with from the cor. of sec. 28-29-32 and 33 in accordance with special instructions, on account of perpendicular and impassable broken - Therefore

At the cor. of sec. 21-22-27 and 28 T.p. 39 S. R. 11 W. Latitude $37^{\circ} 23' N$ Longitude $113^{\circ} 4' W$ which is a stone firmly set marked and situated as described by the surveyor general. At 4:48 P.M. Z.M.T. May 26, 1899 I set off $37^{\circ} 23' N$. on the lat. arc $2104' N$. on the decl. arc and determined a true meridian with the solar. -

The magnetic bearing of the true meridian at $4^{\circ} 10' W$ is $N. 15^{\circ} 20' W$; the angle thus determined reduced by the table page 100 gives the mean mag. decl $15^{\circ} 22' E$. -

From the cor. of sec. 21-22-27 and 28 as above described I run

Subdivision of T. 39 S. R. 11 W.

	chains	West sec. acc. 21 and 28 On mountainous land Descending on broken slope in dense brush set as sandstone 18x9x7 in. 12 in. in the ground for 1/4 sec. cor. marked "How S. face"; raised a mound of stones 2 ft base 1 1/2 ft high N. of cor. Pits impracticable. - This cor. stands at beginning of steep descent to perpendicular sandstone break about 12 ch. N. beyond which it could not be extended I therefore abandon the line here. - Land mountainous, broken slopes Soil gravelly and rocky + dry rate No timber. - Dense oak brush Mountainous land 4,000 ch. -
		May 25, 1899
	20,90	May 26, 1899: at the cor. of secs. 15-16-21 and 22 which is a stone firmly set marked and situated as described by the surveyor general. I set off 37°24' N. on the lat. and 21°50'30" E. on the decl. and and at 844 m. a m., but observed the sun on the meridian; hence I run West sec. acc. 16 and 21 On mountainous land Descending in dense oak brush on broken slope Stream 40 ft wide in bottom of narrow gulch, at head of rocky box. canon 250 ft below cor. cor. 5 thence W. W. break Begin steep ascent
	4,000	Set a sandstone 18x10x7 in. 12 in. in the ground for 1/4 sec. cor. marked "How S. face"; raised a mound of stones 2 ft base 1 1/2 ft high N. of cor. Pits impracticable This cor. stands on top of ridge cor. 5 and 5 300 ft above stream Begin descent on steep broken slope
-	8,000	Set a sandstone 26x10x7 in. 19 in. in the ground for cor. of secs. 16-17-20 and 21 marked with 3 notches on S. and 4 notches on E. edges.

Subdivision of T. 39 S. 11 W.

chains	raised as mound of stones 2 ft. base 1½ ft. high N. of cor. Pitt impracticable This cor. stands about 400 ft. below top of ridge and near edge of perpendicular break 1200 ft. deep course N. and S. Land mountainous very rugged Soil gravelly and rocky. 4th rate. Timber a few scattering pines and piñon trees mainly young growth. Dense oak brush undergrowth Mountainous land 80,000 chs. -
13,14	N 0° 1' W. bet. secs. 16 and 17 On mountainous land Descending gradually in oak brush on rocky broken slope Bottoms of rocky ravine course W. to break in 5 chs. 2.75 ft. below cor. Begin ascent
25,83	Top of slope at 150 ft. high and beginning of descent.
4000	Set as sandstone 26x11x6 in., 19 in. in the ground for 1/4 sec. cor. marked W. on N. face raised as mound of stones 2 ft. base 1½ ft. high N. of cor. Pitt impracticable This cor. stands near edge of perpendicular break over 1000 ft. deep course S and N. 20° E and further draining on this line is impossible therefore I offset as follows: East 20.00 chs.; then on the offset line N 0° 1' W. 40.00 chs.; then
80,000	West 12.95 chs. to edge of perpendicular break over 1000 ft. deep course N. and S or Set as sandstone 18x10x8 in., 12 in. in the ground for witness cor. to cor. of secs. 8-9-16 and 17 marked W. C. on N. W. face with 4 notches on S. and E. edges from which A piñon tree 10 in. diam. bears 5 11/12 E. 26 lbs. dirt marked W. C. T. 39 S. R 11 W. S. 16. B.T. No other trees within limit. Raised as mound of stones 2 ft. base 1½ ft. high N. of cor. Pitt impracticable. -

Subdivision of T. 39 S 12 11 W

chain	Thin cor. stands about 600 ft below the top sec cor. Land mountainous very rugged Soil gravelly and rocky 4th rate - Timber: a few scattering pine and spruce trees Dense oak brush undergrowth - Mountainous land 8000 ft elev. May 26, 1899: At this cor I set off 21° 12' North decl. and at 11° 57' 00" N., 7 m & observed the sun on the meridian: the resulting lat. is 37° 25' N.
32.95	Beyond the northw. cor. to cor. of secs. 8-9-16 and 17 true East over a limestone line bet. secs. 9 and 16 Crossing fence W. C., set fence 1/4 sec cor.
72.90	" " " " " Intervening N. and S. line 7.000 ft N. of cor. of secs. 9-10-15 and 16 which is a stone firmly set marked and situated as described by the surveyor general Three trees N 89° 5' 90" on a line line bet. sec 9 and 16 On mountainous land Descending on steep slope in scattering timber 11.65 Bottom of gulch and dry wash, corresp S. 170 ft. below cor. Begin ascent
22.50	Top of ridge corresp N. and S. 160 ft above gulch Begin broken descent
40.00	Set a limestone 18 x 8 x 6 in. 12 in. in the ground for 1/4 sec. cor. marked 1/4 on N. face: from which A lone pine tree 30 in. diam. bears S. 84° 3' W. 5' 7" dist. dist. marked 1/4 S. 16 B.T. No other trees within limit: Rained a round of stones 2 ft. band 1 1/2 ft. high N. of cor. Pits impracticable
41.00	This cor. stands in bottom of a gulch running S 65° W. and 200 ft. below top of ridge
65.00	Begin ascent on S. slope
65.00	Top of spur S. W. 140 ft. above gulch and beginning of descent to
72.90 80.00	The westw. cor. to cor. of secs. 8-9-16 and 17 The cor. of secs. 8-9-16 and 17 in impassable broken and not set Land mountainous very rugged

Subdivision of T 39 S R 11 W.

chain	Soil gravelly and rocky 14 ft. tall Timber a few scattering pine and pinon trees Dense oak brush Mountain over land 80,000 acrs. -
18.50	From the cor. of secs. 3-4-9 and 10 which is a stone firmly set marked and witnessed as described by the surveyor general, I read West. bot. sec. 4 and 9 On mountainous land Ascending on broken slopes in dense oak brush Top of spur N 200 ft above cor. and beginning of descent
23.00	Bottome of ravine drains N.W. to canon, 150 ft. below top of spur Begin gradual ascent on steep broken & slopes In timber course C1 and S
37.00	Head of gorge 600 ft. deep bears N. 40° E. 400 ft. Set a sandstone 26 x 12 x 9 in. 19 in. in the ground for 14 sec. cor. marked 1/4 on N face from which
40.50	A pine tree 11 in. diam. bears N 40° 2' W. 43 ft. dist. marked 1/45 4 B.T. On aspen tree 4 in. diam. bears S 90° 45' E 9 dist. marked 1/45. 9 B.T. Raised as mound of stones 2 ft. base 1½ ft. height N. of cor.
43.00	Top of spur N. 20° W. 210 ft above ravine Begin steep broken descent. - Leave timber course and S
51.00	Narrow pass between head of two box canons draining N. and S.W. respectively: Thence on N slope to
66.24	Edge of perpendicular sandstone break to Canon 1100 ft. deep course N. E. and S. W. and further progress is impossible. - Set a sandstone 18 x 10 x 6 in., 12 in. in the ground for witness cor. to cor. of secs. 4-6-8 and 9 marked W.C on N.W. face with 4 notches on E and 5 notches on S. edges: - raised a mound of stones 2 ft. base 1½ ft. height N. of cor. Both impracticable. -

Subdivision of T. 39 S. R. 11 W.

80.00

The cor. of secs 4-5-8 and 9 falls in breaks and not set.
 Land Mountainous very broken
 Soil gravelly, rocky and sandy 4th rate
 Timber: scattering fine and pison and some
 aspen: mostly of small size
 Dense oak brush
 Mountainous land \$0.00 per.
 Note it being impossible to survey the remainder
 of this township under the present contract to
 discontinue the work at this cor.

May 26, 1879

General Description

The small portion of this township covered by
 the present survey is all mountainous
 land and suitable only for summer pasture. -
 There is a fence partly completed and recently
 made by John Jefferson in the eastern part
 of sec 16 near the center of E. body; it incloses
 the only water in this part of the township, which
 is a small spring branch heading in sec. 15.
 There is no settle nor habitation of any kind.
 The timber is very scattering and of no commercial
 value. - There are no indications of ore or minerals
 of any kind. -

The remaining, unoccupied portion of this
 township covers the main part of the Le Verkin
 Breaks, and it would probably be difficult to find
 anywhere else a patch of land of equal ruggedness,
 commencing on the east with a vertical break
 or fault more than a thousand feet in depth
 it extends westward in a series of broken, broken
 reefs, ridges, and pillars with perpendicular sides
 hundreds of feet high, and all jumbled together
 without system or regularity of any kind. -
 The western boundary of all this is the Le Verkin
 Creek in a narrow gorge on the west of which a
 steep but even slope of black lava slide extends
 to a level plateau land overflow. -

Andreas O. Hanson.

U. S. Deputy Surveyor

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Final Oaths of Deputy Surveyor and his Assistants.

LIST OF NAMES.

A list of the names of the individuals employed by _____

, United States Deputy Surveyor, to assist in running, measuring, and

marking the lines and corners described in the foregoing field notes of the survey of _____

showing the respective capacities in which they acted:

, Chainman.

, Chainman.

, Moundman.

, Moundman.

, Axman.

, Axman.

, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted _____

, United States Deputy Surveyor, in surveying all

those parts or portions of the _____

and _____ of the _____ base
meridian, _____ of _____, which are represented

the foregoing field notes as having been surveyed by him and under his direction; and that said survey
has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the
corner monuments established, according to the instructions furnished by the United States Surveyor
General for _____

, Chainman.

, Chainman.

, Moundman.

, Moundman.

, Axman.

, Axman.

, Flagman.

scribed and sworn to before me this _____
day of _____, 189 }



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Final Oath of United States Deputy Surveyor.

I, _____, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from _____, United States Surveyor General for _____, bearing date of the _____ day of _____, 189_____, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for _____, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of _____

_____ of the base and _____ meridian, in the _____ of _____, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for _____ and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey; and should any fraud be detected, I will suffer the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

United States Deputy Surveyor.

Subscribed by said _____, and sworn to before me this }
day of _____, 189_____ }



APPROVAL.

Office of the United States Surveyor General,

Salt Lake City, Utah, May 5th 1900, +00

The foregoing field notes of the survey of *The Subdivision Line of Township 39 South Range 11 West of the Salt Lake Base Meridian, Salt Lake*

executed by *Audieer P. Haunert*
under his contract No. 220, dated April 1st, 1898, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Jacob J. Blair
United States Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in _____, has been correctly copied from the original notes on file in this office.

United States Surveyor General.

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BOOK A-256

FIELD NOTES

OF THE SURVEY OF

*South, West and North Boundaries**of**Township N^E 38 South Range W^E 11 West*Of the *Salt Lake Baseline Meridian,**Utah*

AS SURVEYED BY

Andrew P. Lawrence, United States Deputy Surveyor,

Under his Contract No. 220, dated April 1, 1898

Survey commenced May 27, 1898

Survey completed May 31, 1898

6-161

		M. C. in Miles -
S - Poly -	High	2 - 66 - 33 ✓
W - " "	High	6 - 78 - 15 ✓
N - " "	High	1 - 02 - 96 ✓
" " "	Average	✓ - 38 ✓

Names and Duties of Assistants.

Henry E. Ginn Chaimaness

Thomas B. Lyman "

Henry E. Ginn Moudaness

Joseph Bryant "

Joseph Bryant Ax man

Edward H. Parry "

Edward H. Parry Flag man

John Gardell Ax man or Flag man

For preliminary official lists see books B and G

BOOK A-256

INDEX DIAGRAM.

Township _____, *Range* _____

6	5	4	3	2	1
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19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

Meanders Page _____

Preliminary Oaths of Assistants.

We, _____ and _____
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of _____

_____, Chainman.

_____, Chainman.

Subscribed and sworn to before me this _____
day of _____, 189 }



We, _____ and _____
do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of _____

_____, Moundman.

_____, Moundman.

Subscribed and sworn to before me this _____
day of _____, 189 }



We, _____ and _____
do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey of _____

_____, Axman.

_____, Axman.

Subscribed and sworn to before me this _____
day of _____, 189 }



I, _____, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of _____

_____, Flagman.

Subscribed and sworn to before me this _____
day of _____, 189 }



South Boundary of T. 38 S. R. 11 W.

Chains

Survey commenced May 27, 1899 and executed with a Gurley light mountain transit with solar attachment. - The horizontal limb is provided with two double vernier placed opposite to each other and reading to single minutes of arc, which is also the least count of the vernier of the latitudes and declination arcs. -

The instrument was examined, tested on the true meridian at Salt Lake, found correct and was approved by the surveyor general for Utah August 23, 1898. -

I examine the adjustments of the transit and correct the level and collimation errors; then to test the solar apparatus by comparing its indications resulting from Solar observations made during a.m. and p.m. hours with a true meridian determined by observation on Polaris I proceed as follows. -

At the cur. of recs. 3-4-33 and 34 on S. bdy. of Tp. 38 S. R. 11 W. latitude $37^{\circ} 26'$ N. longitude $113^{\circ} 3' W.$ I set off $37^{\circ} 26'$ N. on the lat. arc $21^{\circ} 24' N.$ on the decl. arc and at $3^{\circ} 31' E.$ on. I set determine with the solar a true meridian and mark a point thereof on a stake firmly set in the ground 5.00 chs. N. of my station. -

At $8^{\text{h}} 15^{\text{m}}$ p.m., I observed Polaris at its lower culmination in accordance with Manual of Instructions and mark the True meridian thus determined by a nail driven in the stake previously set 5.00 chs. S. of my station. -

May 27, 1899

May 28, 1899 at $7^{\text{h}} 49^{\text{m}}$ a.m., I set off $37^{\circ} 26' N.$ on the lat. arc $21^{\circ} 30' 30'' N.$ on the decl. arc and mark a point in the true meridian determined by the solar, on the stake set May 27. at 5.00 chs. S. of the instrument. -

The two meridians thus determined by p.m. and a.m. Solar observations agree respectively within $1'$ of arc with the true meridian.

South Boundary of T 38 S. R 11 W.

Chain	<p>determined by Polaris observations and I therefore conclude the adjustments of the instrument are satisfactory. —</p> <p>The magnetic bearing of the true meridian at 8400 ft. a.m.s.t. is N. $15^{\circ} 38'$ W.; the angle thus determined reduced by the table page 100 gives mean mag. decl. $15^{\circ} 34' E.$</p>
22,000	<p>From the cor. of secs. 3-4-33 and 34 as already described which is a stone firmly set marked and intersected as described by the surveyor general I run</p> <p>West. bch. secs. 4 and 33</p> <p>On mountainous land</p> <p>Descending on broken slope in dense oak brush</p> <p>Edge of rocky canon bank N.W. and S.E.</p> <p>Begin abrupt descent</p>
2655	<p>Dry wash in bottom of canon 250 ft. deep, course N.W. and beginning of abrupt ascent to</p>
33,250	<p>Top of canon and beginning of broken ascent</p>
4,000	<p>Set a sandstone 18 x 11 x 7 ins. 12 ins. in the ground for cor. rec. circimmarked $\frac{1}{4}$ on N. face; raised as mound of stones 2 ft. base 1$\frac{1}{2}$ ft. high N. of cor. Pili impracticable. —</p>
73,350	<p>Top of spur N. 30° W. 360 ft. above top of canon</p> <p>Begin descent to</p>
8,000	<p>Set a Sandstone 26 x 9 x 6 ins. 18 ins. in the ground for cor. of secs. 4-5-32 and 33 marked with 2 notches on W. and 4 notches on E. edges. raised as mound of stones 2 ft. base 1$\frac{1}{2}$ ft. high N. of cor. Pili impracticable</p> <p>Land mountainous very broken</p> <p>Soil gravelly and rocky 4$\frac{1}{2}$ rate</p> <p>No timber. —</p> <p>Dense Oak brush and thorn</p> <p>Mountainous land 8,000 ft. —</p>
31,500	<p>West bch. sec. 5 and 32</p> <p>On mountainous land</p> <p>Descending on broken slope in dense oak brush</p> <p>Edge of perpendicular bank to canon bears N. 30° E. and S.</p>

South Boundary of T. 35 S. R. 11 W.

chain	00° W. and further chaining is impossible. Therefor set a sandstone 18 x 9 x 6 in. 12 in. in the ground for witness cor. to 1/4 sec cor. which falls in the canon and can not be set, marked N.C. 1/4 on its face raised a mound of stones 2 ft base 1 1/2 ft high N. of cor. Piti impracticable
53.14	At this witness cor. I set a flag and measured a baseline South. 14.10 chn. to a flag, and go to a point on the opposite side of canon where flag at witness cor. bears East, and flag at S. end of baseline bears S. 57° 11' E. hence distance $00^{\circ}49' \times 14.10 = 23.64 + .5150 =$
75.60	West side of canon comes N.E. and S.W.; a small stream in bottom of canon runs S.W. Set a sandstone 18 x 12 x 6 in. 12 in. in the ground for witness cor. to 1/4 sec. cor. marked 1/4 N.C. on N. face: raised a mound of stones 2 ft base 1 1/2 ft high N. of cor. Piti impracticable Descending on steep broken slope to top of ridge bears N.E. and S.W. 300 ft above witness cor.
8,000	Descending to Set a sandstone 18 x 11 x 9 in. 12 in. in the ground for cor. of secs. 6-6-31 and 32 marked with 1 notch on N. and 5 notches on E. edges: raised a mound of stones 2 ft base 1 1/2 ft high N. of cor. Piti impracticable Land mountainous very broken Soil gravelly and rocky 4 th rate Timber, a few scattering pine trees Dense oak and thorn undergrowth Mountainous land 8,000 chs. - May 28: 1899: The sky being overcast during the noon hour I could not observe the sun on the meridian
12,800	West sec. res. 6 and 31 On mountainous land Descending on broken slope in dense oak brush Edge of perpendicular break to LeVertier Canon 600 ft deep, corries N.E. and S.W. and further chaining is impossible I therefore set a flag on

South Boundary of T. 38 S. R. 11 W.

chains	line at this point and measure a baseline South 16,000 chs. to a flag, and go to the opposite side of canyon to a point where flag on line bears East and flag on S. end of baseline bears S. 62° 05' E hence: tan. $53^{\circ} 55' \times 16,000 = 22,31 + 12.80 =$
35.11	West side of canyon top of perpendicular break, course S. W. and N. E.: La Verne Creek & other side flows S. W. along its contour. - Begin ascent
38.00	Top of spur 500 ft high Begin descent on S. slope. Very broken.
40.00	Set a sandstone 18 x 11 x 6 in. 12 in. in the ground for 1/4 sec. cor. marked 1/4 sec. & face; raised a mound of stones 2 ft high 1 1/2 ft. high N. of cor. Pits impracticable
53.50	Begin abrupt descent to
55.70	Bottom of ravine 100 ft deep course S. Begin ascent on steep slope to to
57.40	Top of ravine and beginning of broken ascent to
58.00	Set a temporary cor. of Tps. 38 and 39 S. R. 11 and 12 W. <i>(Note: Permanent cor. of Tps. 38 and 39 S. R. 11 and 12 W. set at 66.33 chs.)</i> For description see end of section of N. bdy. of Th. Land mountainous Very broken soil gravelly and rocky 4 to rate No timber Dense oak and thorn brush Mountainous land 66.33 chs. -
	May 28, 1899.

May 29. 1899: At 8⁴ 30^m a.m., I set off
37° 2' "N. on the lat. and 210° 40' W. on the decl.
arc and determined a true meridian with the
rope at the temp. cor. of Tps. 38 and 39 S. R. 11
and 12 W.

Then I run

North on a random line along N. bdy. of Th. 38 S.
R. 11 W. setting temp. 1/4 sec. and sec. cor. at
intervals of 40.00 chs. and at 558.15 chs.

Intercept S. bdy. of Th. 37 S. R. 12 W. 13.67 chs. W.
of cor. of Ths. 37 and 38 S. R. 11 and 12 W. which
is a stone firmly set marked and witnessed
as described by the surveyor general

West Boundary of T. 38 S. R. 11 W.

chain	Thence Grand South - bet. secs 1 and 6 On mountainous land Ascending on broken W. slope in dense oak brush.
27.25	Rainier 90 ft deep drains W.
49.50	Begins descent on side of ravine to
51.30	Bottom of ravine 150 ft deep crossed W. Ascending to
79.00	Top of ridge from plateau N. 36° ft. above cor. Begin descent on broken slope
118.15	Set a sandstone 18 x 9 x 7 in. 12 in. in the ground for 1/4 sec. cor. marked 1/4 sec. W. face ravined or worn of stones 2 ft. base 1 1/2 ft. high W. of cor. Pitt imperceptible
125.00	Edge of perpendicular break to canyon 200 ft. high bears N. 60° E. and S. 60° E. and further chaining is impossible; I therefore set a flag on line at this point and measured a baseline east 13.70 ch. to a flag and go to the opposite side of canyon to a point where flag and one end bears North - and flag at E. end of baseline bears N. 32° 27' E. hence ^{East} 32° 27' X 13.70 = .. $21.52 + 12.57 =$
.46.52	S. edge of canyon, top of perpendicular break crosses S. 60° E. and N. 60° W. about 100 ft. below S. side - Canyon drains S. 60° E. - no stream Begins slight ascent on even side
158.15	Set a sandstone 18 x 10 x 8 in. 12 in. in the ground for cor. of sec. 1-6-7 and 12 connected with 1 notch on E. and 5 notches on S. edge; ravined or worn of stones 2 ft. base 1 1/2 ft. high W. of cor. Pitt imperceptible Pit cor. stands 275 ft above top of break. Land mountainous very broken soil gravelly and rocky $\frac{4}{5}$ rock Timber: a few scrubby pines scattering dense oak brush and thorn Mountainous land 158.15 ch. -

May 29. 1899

West Boundary of T. 38 S.R. 11 M.

	chain	May, 30. 1899 Canon South bet. sec. 7 and 12 On mountain land Ascending, in dense oak brush
28.20		Top of ridge bears N.W. and S.E. 300 ft above cor. Begin descent on broken slope
4,700		Set at sandstone 18x12+9 in., 12 in. in the ground for 14 sec. cor. marked "14 on" W. face; raised as mound of stones 2 ft. base 1½ ft. high W. of cor. Pit impracticable
66.50		Edge of canon bears N. 60° W. and S. 60° E. 300 ft. below ridge Begin abrupt descent and rocky slope
74.0		Dry wash in bottom of canon 300 ft. deep cor. N. 60° W.
87.00		Begin abrupt ascent on rocky slope Set at sandstone 26x10x9 in., 19 in. in the ground for cor. of sec. 7-12-13 and 18 marked with 2 notches on N. and 4 notches on S. edges; raised as mound of stones 2 ft. base 1½ ft. high W. of cor. Pit impracticable. - Land mountainous very broken Soil gravelly and rocky 4 th rate No timber! Dense oak brush Mountainous land 80.00 ch. -
		May, 30. 1899! At this cor. back off - 21° 50' E. Now the decl. arc and at 11458 m. a.m. I set & observed the sun on the meridian! The resulting lat. is 37° 30' N.
		South bet. sec. 13 and 18 On mountain land Ascending on steep rocky slope in dense oak brush
2.55		Foot of perpendicular, break 70 ft high bears N. 70° W. and S. 70° E.
36.00		Top of spur 500 ft. above cor. runs E. Begin gradual descent
45.00		Set at sandstone 18x13x6 in., 12 in. in the ground for 14 sec. cor. marked "14 on" W. face; raised as mound of stones 2 ft. base 1½ ft. high W. of cor. Pit impracticable

West Boundary of T 38 S R 11 W.

chain	
49,73	Stream 100' wide. floor N.E. in bottom of gulch. 80 ft deep. Begin ascent on broken S.W. slope Set a black lava stone 18x8x7 in., 12 in. in the ground for cor. of secs 13-18-19 and 24 marked with 3 notches on S. and N. edges; raised a round of stones 2 ft base 1½ ft. high W. of cor. Pitt impracticable
80,00	Thin cor. stands 300 ft above bottom of gulch Land mountainous very broken Soil gravelly and rocky 4th rate No timber Dense oak and cherry brush Mountainous land 8,000 chs. -

	May 30, 1899: At 2 ⁴⁵ m p.m., I set off 37° 29' 30" S. from the lat. arc 21° 52" N. on the decl. arc and determine a true meridian with the solar at the cor. of secs. 13-18-19 and 24. Hence I run South. sec. lines 19 and 24 On mountainous land Ascending steep slope in dense oak brush Top of ridge bears E and W. 100 ft above cor. -
6,00	Begin descent on rolling slope Set a sandstone 18x9x7 in., 12 in. in the ground for 1/4 sec. cor. marked 1/4 on W. face & raised a round of stones 2 ft base 1½ ft high W. of cor. Pitt impracticable
4,000	Bottom of gulch 300 ft below top of ridge cor. and S 76° E
4,730	Ascending to Top of spur. E 100 ft. high. and beginning of descent.
5,500	Bottom of gulch, course E and N. E 175 ft deep
7,110	Begin ascent
8,000	Set a sandstone 26x10x6 in., 19 in. in the ground for cor. of secs. 19-24-25 and 30 marked with 4 notches on S. and 2 notches

West Boundary of T 38 S R 11 W.

clearing	on s. edge or raised a mound of stones 2 ft base 1½ ft. high N. of cor. Pits impracticable Land mountainous very broken soil gravelly and rocky 4 th rate no timber. dense oak brush mountainous land 8,000 chs. - May 30. 1899
8,500	May 31. 1899 at 8 ⁴ 10 m a.m., I set off 37° 29' S. on the lat. arc 21° 58' N. on the decl. arc and determine a true meridian with the solar al- timeter of secs. 19-24-25 and 30 thence I run South decl. secs. 25 and 30 On mountainous land ascending, in dense oak brush Top of spur N. 100 ft. above cor. Begin descent on broken slope
15,544	Begin abrupt descent on rocky slope to bottom of cañon and dry wash, course N. 60° W. 350 ft. deep.
30,255	Begin ascent on steep rocky slope set a sandstone 18 x 10 x 9 ins. 12 ins. in the ground for 34 sec. cor. marked 34 on N. face raised a mound of stones 2 ft base 1½ ft. high N. of cor. Pits impracticable
41,570	Top of canon. and ridge bears S 75° E and N 75° W 275 ft. above bottom Begin descent on broken slope to
8,600	set a sandstone 18 x 11 x 9 ins. 12 ins. in the ground for cor. of secs. 25-30-31 and 36 marked with 5 notches on N and 1 notch on S. edges; raised a mound of stones 2 ft. base 1½ ft. high N. of cor.-Pits impracticable.- This cor. stands 275 ft. below top of ridge Land mountainous very broken soil gravelly and rocky 4 th rate Timber: a few pine and cedar in cañon dense oak brush undergrowth - mountainous land 8,000 chs. - May 31. 1899: the weather being cloudy during

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West Boundary of T 38 S R 11 W.

chains	the noon hour I could not observe the sun while on the meridian.
27,80	Soulli bet. sec. 31 and 36 On mountainous land Descending on broken slope, in dense oak brush Bottom of ravine 175 ft deep crossed S.W. Ascending to
32,00	Top of ravine and beginning of broken descent
40,00	Set a sandstone 18 x 10 x 8 in. 12 in. in the ground for. 114 sec. cor. marked 114 cor. W. face, raised a mound of stones 2 ft. base 1½ ft. high w. of cor. Pits impractical
51,00	Descend abruptly to
55,44	Bottom of ravine 200 ft deep crossed S.W. Ascending to
61,50	Top of ravine and beginning of descent on broken rocky slope to
80,00	Intersect S. bdy. of Tps. 13, 6, 7 chs. E. of the tenth. cor. of Tps. 38 and 39 S R 11 and 12 in. set by me May 29, 1899. Set a sandstone 28 x 12 x 9 in. 20 in. in the ground for. cor. of Tps. 38 and 39 S R 11 and 12 W. marked T. 38 S. cor. S. E. T. 39 S. cor. S. E. R. 11, W. cor. S. E. and R 12 N. W. faces with 6 notches on each edge & raised a mound of stones 2 ft. base 1½ ft. high S. of cor. Pits impractical Land mountainous very broken Soil gravelly and rocky 4 laterite No timber Dense oak brush Mountainous land 8,000 chs. -
	May 31, 1899

June 1, 1899 at 7⁴⁵ a m, I set off
97° 33' N. over the lat. arc 22° 06' Nor the decl.
arc and determining a true meridian with
the solar at the cor. of secs. 1-2-35 and 36 on
N. bdy. of T. 38 S R 11 W. which is a stone firmly
set marked and witnessed as described by the
surveyor general: three (3) rods

North Boundary of T. 38 S. R. 11 W.

Chains	East bet. secs. 1. and 36
	On mountainous land
	Ascending gradually on rolling plateau
	Cabin and corral. bears S. 90° E. cl. 1. deserted
	and claimed by Wm. Day
5,70	Top of spur S. E. 50 ft. above cor.
	Begin descent to
17,00	Bottom of gulch 80 ft. deep. course S. W.
	Begin ascent
20,00	N. E. cor. of fence bears. S. 2. cl. 1.
24,00	Top of spur S. 60 ft. high
	Descending to
34,00	Enter aspen timber covered N. and S.
40,00	Set a sandstone 18 x 16 x 5 in. 1.2 in. in the ground for 1/4 sec cor. marked 1/4 sec N. face from which an aspen tree 8 in. diam. bears S. S. 1.0 E. 2.8 cl. 1. dist. marked 1/4 sec 1 B. T.
	No other trees within limb; raised a mound of stones 2 ft. base 1 1/2 ft. high N. of cor.
	Pits impracticable
45,88	Stream 4 hrs. wide course N 60° E. in bottom of gulch 250 ft. deep.
	Begin ascent on N. W. slope
52,50	Top of spur at. 30 ft. high and beginning of descent
60,40	Creek 5 hrs. wide course S 40° E. in bottom of gulch 90 ft. below top of spur
60,86	Stream 4 hrs. wide course S 20° E. 1 chain above junction
	Begin ascent on steep slope; leaving timber bear road
65,60	Top of spur S. 110 ft. above stream; thence, on steep S. slope to
82,96	Intersection N. bdy. of Tp. 37 S. R. 10 W. at 5.38 cl. N. 1/2 cor. of Tp. 37 S. R. 10 and 11 W. which is a stone firmly set marked and situated as described by the surveyor General.
	Set a sandstone 26 x 10 x 7 in. 1.8 in. in the ground for closing cor. of Tp. 37 and 38 S. R. 11 W. marked T. 37 S. on N. - T. 38 S. on S. - R. 11 W. C.C. on N. with 6 stones on N. S. and 10 feet, raised a mound of stones 2 ft. base 1 1/2 ft. high N.

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North Boundary of T. 38 S R. 11 W.

of cor. Pts impracticable.
Land mountainous broken and sloping
soil gravelly and rocky 4th rate
Timber aspen of small size and a few pine
Mountainous land 82.96 ac.

The cor. of T 37 S R 10 and 11 W are already described
(I remark as follows for S.W. cor. of T 37 S R 10 W;
- 37 S. 10 W. on N.E. face with 6 notches on N and E
edges; raised a mound of stones 2 ft. base 1 $\frac{1}{2}$ ft high.
N.E. of cor. Pts impracticable.) -

The cor. of T 38 S. R 5 10 and 11 W., being a stone
firmly set marked and witnessed as described
by the surveyor general. (I re-mark as follows
for N.W. cor. of Tp. 38 S R 10 W. - 37 S. 10 W. on S.E.
face with 6 notches on S and E edges; raised a
mound of stones 2 ft. base 1 $\frac{1}{2}$ ft high S.E. of
cor. Pts impracticable.) -

June 1. 1899

Boundaries of T 38 S R 11 W.
Latitudes Departures and closing errors.

Line designated	True bearing	Distance ds.	Latitude		Departures	
			N ds.	S ds.	E ds.	W ds.
Horob Guide Meridian	North	552.20	552.20			
N. bdy. T. 38 S R 10 W.	East	19.80			19.80	
W. T. 37 S R 10 W.	North	5.38	5.38			
North bdy.	Wcs 2	482.96				482.96
West bdy.	South	558.15		558.15		
South bdy.	East.	466.33			466.33	
Consequently			557.58	558.15	486.13	483.52
Totals				557.68	483.52	
Error in Lat. and Dep.			0.57	2.61		.56

For general descriptions see end of notes of subdivision
survey of this Tp.

Andrew P. Hanson
U.S. Land Surveyor

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Final Oaths of Deputy Surveyor and his Assistants.

LIST OF NAMES.

A list of the names of the individuals employed by Andrew P. Hamnerd,
 United States Deputy Surveyor, to assist in running, measuring, and
 marking the lines and corners described in the foregoing field notes of the survey of E. Bdy. of T. 10 S.
 R. 2 E. - S. Bdy. of T. 39 S. R. 2 W. - S. Bdy. of T. 39 S. R. 10 W. and S. W. and N. E. Bdy.
 of T. 38 S. R. 11 W.
 showing the respective capacities in which they acted:

Henry E. Giers, Chainman.
Thomas E. Lyons, Chainman.
Henry E. Giers, Moundman.
John Gardell, Moundman.
John Gardell, Axman.
John Gardell, Axman.
John Gardell, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Andrew P. Hamnerd,
 United States Deputy Surveyor, in surveying all
 those parts or portions of the E. Bdy. of T. 10 S. R. 2 E. - S. and S. E. Bdy. of
 T. 39 S. R. 2 W. - S. Bdy. of T. 39 S. R. 10 W. and S. W. and N. E. Bdy.
 of T. 38 S. R. 11 W.

of the Salt Lake base
 and St. Paul of 117.4, which are represented
 in the foregoing field notes as having been surveyed by him and under his direction; and that said survey
 has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the
 corner monuments established, according to the instructions furnished by the United States Surveyor
 General for Utah.

Henry E. Giers, Chainman.
Thomas E. Lyons, Chainman.
Henry E. Giers, Moundman.
John Gardell, Moundman.
John Gardell, Axman.
John Gardell, Axman.
John Gardell, Flagman.

Subscribed and sworn to before me this 26th
 day of June, 1809 }

SEAL
HEAL

6-161

Sam. Raney
Notary Public

My Commission expires August 11th 1901

Final Draft of United States Deputy Surveyor.

I, _____, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from _____, United States Surveyor General for _____, bearing date of the _____ day of _____, 18_____, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for _____, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of _____.

..... of the base
and meridian, in the of, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey; and should any fraud be detected, I will suffer the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

United States Deputy Surveyor.

Subscribed by said _____, and sworn to before me this
____ day of _____, 189



APPROVAL.

Office of the United States Surveyor General,

, 189

The foregoing field notes of the survey of

executed by _____
under his contract No. _____, dated _____, 18_____, having been
critically examined, and the necessary corrections and explanations made, the said field notes, and the
surveys they describe, are hereby approved.

United States Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in _____, has been correctly copied from the original notes on file in this office.

Final Oaths of Deputy Surveyor and his Assistants.

LIST OF NAMES.

A list of the names of the individuals employed by Andrew O'Hanlon

, United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of *the S. Bdry. of T. 39 S.R. 10th S. W. and N. Bdry. of T. 38 S.R. 11th of the last E&E Bank & Guide* showing the respective capacities in which they acted.:

---, *Chainman.*

..., *Chairman.*

Moundman.

Joseph Bryant, Moundman.

Joseph Bryant, Axman.

Edward J. Parry, Axman.

Edward S. Parry, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Andrew P. Hanson

., United States Deputy Surveyor, in surveying all

those parts or portions of the S. 13deg. of T. 39 S. R. 10 W. and S. N. and N.
Bdgs. of T. 38 S. R. 11 W.

of the Salt Lake base

nd meridian, State, of State, which are represented
in the foregoing field notes as having been surveyed by him and under his direction; and that said survey
has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the
corner monuments established, according to the instructions furnished by the United States Surveyor
General for State.

Chairman,

Chairman.

Moundman,

Joseph Bryant, Moundman.

Joseph Bryant, Axman.

Edward G. Parry, Axeman.

Edward H. Patry, Flagman.

Subscribed and sworn to before me this 16th

day of June, 1897.



**My Commission Expires
March 20th, 1903**

Senora G. Dally
Rotary Public

I, Andrew J. Hanson, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from Jacob B. Blaine, United States Surveyor General for The State of Idaho, bearing date of the 1st day of April, 1898, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for The State of Idaho, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of The extraterritorialities of the U.S. R.R. C. 1395 & 9 W. T. 38 S. R. 10 M. & T. 39 S. R. 10 M. & T. 38 S. R. 11 M.

..... of the Salt Lake base and no. 20. D. S. N. M. meridian, in the State of Idaho, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for Idaho, and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey; and should any fraud be detected, I will suffer the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

Andrew J. Hanson
United States Deputy Surveyor.

Subscribed by said Andrew J. Hanson, and sworn to before me this
30th day of September, 1898

○○○○○
S E A L
○○○○○

Jacob J. Blaine
Surveyor General for Idaho

APPROVAL.

Office of the United States Surveyor General,

Salt Lake City, May 5th 1900

The foregoing field notes of the survey of The South West & North Boundaries
Township Sixteenth Range 11 West of the Salt Lake Meridian Idaho

executed by

Andrew J. Hanson
under his contract No. 220, dated April 1st, 1898, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Jacob J. Blaine
United States Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in _____, has been correctly copied from the original notes on file in this office.

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BOOK A-256.

FIELD NOTES

OF THE SURVEY OF

*Subdivision Lines**of**Township No. 38 South - Range No. 11 West*

Of the Salt Lake Base and Meridian,

Utah

AS SURVEYED BY

Andrew P. Hanson, United States Deputy Surveyor,

Under his Contract No. 220, dated April 1, 1898

Survey commenced June 1, 1898

Survey completed June 12, 1898

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*Subs. high 36-40-85 ✓**Change 2-70-73 ✓*

Names and Duties of Officers.

Henry E. Ginn - Chairman

Thomas E. Lyon

Henry E. Ginn

Manned

Joseph Bryant

Joseph Bryant

Ammunition

Edward H. Parry

Edward H. Parry

Flagman

John Gaedel Amason

Influence money affidavits & books 10 & 44

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INDEX DIAGRAM.

Township _____, *Range* _____

6	5	4	3	2	1
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19	20	21	22	23	24
30	20	28	27	26	25
31	32	33	34	35	36

Meanders Page _____

Preliminary Oaths of Assistants.

WE, and
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of

....., Chainman.

....., Chainman.

Subscribed and sworn to before me this }
day of, 189 }



WE, and
do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of

....., Moundman.

....., Moundman.

Subscribed and sworn to before me this }
day of, 189 }



WE, and
do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey of

....., Axman.

....., Axman.

Subscribed and sworn to before me this }
day of, 189 }



I, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of

....., Flagman.

Subscribed and sworn to before me this }
day of, 189 }



Subdivision of T 38 S R 11 W.

chain Survey commenced June 1, 1899 and executed with a Gurley Light Mountain Transit with solar attachment. - The horizontal limb is provided with two double verniers placed opposite to each other and reading to single minutes of arc which is also the least count of the verniers of the latitude and declination arcs.

The instrument was examined, tested on the true meridian at Salt Lake, found correct and was approved by the surveyor general of Utah August 23, 1898.

I examine the adjustments of the transit and correct the level and collimation error, then to test the solar apparatus by comparing its indications resulting from solar observations made during a.m. and p.m. hours with a true meridian determined by observation on Polaris I proceed as follows:-

At the cor. of acres. 23-24-25 and 26 T.R. 38 S. R. 11 W., latitude $37^{\circ}29'N$. longitude $113^{\circ}01'W$. I set off $37^{\circ}29'N$ on the lat. arc. $22^{\circ}.09'N$ on the decl. arc. and at $+15^{\circ}30'25''$, 2 m. S. determine a true meridian with the solar and mark a point thereof on a stone firmly set in the ground 500 chs. N. of the cor.

At 84^{39.7m} from 2 m. S. I observed Polaris at Lowest Culmination in accordance with Manual of Instructions and mark the true meridian thus determined on the stone previously set 500 chs. N. of my station. -

June 1, 1899

June 2, 1899 at 7¹¹35^m a.m., I set off $37^{\circ}29'$ N. on the lat. arc $22^{\circ}14'N$ on on the decl. arc and mark a point in the true meridian determined by the solar on the stone set June 1, 1899 at 500 chs. N. of my station. -

The true meridian as determined by p.m. and a.m. solar observation agree respectively within 1' of arc with the True meridian determined by observation on Polaris and I therefore conclude

Subdivision of T 38 S R 11 W.

chain-	the adjustments of the instrument are satisfactory. The magnetic bearing of the true meridian at 74° 45' m a.m. is N. 15° 36' W. the angle thus determined reduced by the table page 100 gives mean mag decl. 15° 30' E. —
	I begin at the cor. of secs. 23-24-25 and 26 as already described, which is a stone firmly set marked and witnessed as described by the surveyor general, thence I run N 8° 1' W. bet. secs. 23 and 24 On mountainous land Ascending in dense oak brush on broken S.E. slopes Top of ridge between Kolob and LeVerkeis creeks bears N 18° E and S 18° W. 140 ft. above cor.
11.50	Begin gradual descent on steep broken W. slopes Enter aspen timber cover E and W.
23.00	Set a sandstone 18 x 7 x 5 ins. 12 ins. in the ground for 1/4 acre cor. marked 1/4 cor. W. face from which An aspen tree 4 ins. diam. bears S 44° 30' W. 32 clrs. dist. marked 1/4 S 24 B.T.
40.00	An aspen tree 4 ins. diam. bears N 64° 5' E. 32 clrs. dist. marked 1/4 S 24 B.T.
	Raised a mound of stones 2 ft. base 1 1/2 ft. high W. of cor.
42.60	Leave timber cover E and W.
72.00	Leave of hollow drains W., and beginning of ascent
74.00	Osclop of coal ledge bears N 25° W. and S 25° E
80.00	Set a sandstone 18 x 10 x 6 ins. 12 ins. in the ground for cor. of secs. 13-14-23 and 24 marked with 3 notches on S and 1 notch on E edges; raised a mound of stones 2 ft. base 1 1/2 ft. high W. of cor. Pits impracticable -
	This cor. stands 350 ft below lip of ridge From this cor. the cabin of Sam. Wallace at the N.W. cor. of a fence enclosing about 3 acres of cultivated land bears S 55° 6' W. 30,60 clrs.
	The N.E. cor. of a fence enclosing about 2 1/2 acres of cultivated land bears N 44° 20' W. 37,30 clrs. Ownership could not be learnt.

Subdivision of T. 38 S. R. 11 W.

chains	Land mountainous very rugged Soil gravelly and rocky 3rd rate Timber, aspens of small size Dense oak-and-cherry brush undergrowth Mountainous land 8,000 ft. -
4,000	N. 89° 51' E. on a random line bet. sec. 13 and 24 Set cor. 1/4 sec. cor.
79.94	Indicates Kolob Guide meridian and E. bdy. of Th. 35 sec. 1 of cor. of sec. 13 and 24 which is a stone firmly set marked and witnessed as described by the surveyor general. - Thence I run N. 89° 54' W. on a true line bet. sec. 13 and 24 On mountainous land Descending on steep w. slope in dense oak and aspen brush
28.70	Kolob or. Big Creek 4 lbs. wide course S. in bottom of narrow gulch 390 ft. below cor. Begin ascent
29.87	Road from top of mountain to Virgin River bears N and S
32.00	Log cabin claimed by Joe Prince and Reese Davis bears N 5° 30' W. 165' Ch. - in bottom of hollow at junction of three gulleys; there is also a small coral on the E. side of cabin. -
39.97	Set a sandstone 18 x 11 x 5 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 ord N. face raised a mound of stones 2 ft. base 15 ft. high N. of cor. - Pill impracticable
6,900	Top of slope and ridge between Kolob and Le Verkin creeks bears N and S 400 ft. above creek Begin descent on rocky broken slope In scattering fine timber, course N and S
73.50	Perpendicular sandstone ledge 25 ft. deep course N. and S.
75.60	Perpendicular sandstone ledge 30 ft. deep course N. and S.
	Leave fine timber course N. and S.
79.94	The cor. of sec. 13-14-23 and 24 This cor. stands 200 ft. below top of ridge.

Subdivision of T 38 S R 11 W.

	chains	<p>Land mountainous Very rugged Soil gravelly and rocky 3rd rate Timber, aspens of small size in scattering bunches and a few pine trees on W side of ridge Dense, oak aspens and cherry brush Mountainous land 79.94 chs. — June 2. 1899: At this cor. I set off $22^{\circ} 15' 30''$ N. on the decl. arc. and at 11⁴⁵ a.m., 2 m.t. observe the sun on the meridians; the resulting lat. is $37^{\circ} 29' 30''$ N. —</p>
		<p>Having run N 00¹' W. bet. secs 13 and 14 on a random line, to the intersection of S. bdy. of sec. 11 which fall outside of the closing limit therefore: From the 1/4 sec. cor. bet. secs. 13 and 14 which is a stone firmly set marked and witnessed as described by the surveyor general I run: S 0¹' E. bet. secs. 13 and 14 On mountainous land Descending to</p>
190		<p>Top of break from plateau to head of Le Verheide Creek course N 30⁰ W and S 30⁰ E Thence on steep rocky slope of break to</p>
510		<p>Head of wash drains W. and beginning of ascend</p>
10,60		<p>Top of break bears N 25⁰ E and S 25⁰ W. Enters plateau and ascending surface</p>
37,50		<p>Top of ridge course N. E. and S. W. 250 ft above break. —</p>
		<p>Begin descent on S E slope</p>
75,40		<p>Bottom of gulch 300 ft deep course S 75⁰ E Descending on broken N E slope to</p>
118,62		<p>Intersect N. bdy. of sec 24 15.34 chs. S 89° 54' E. of cor. of secs. 13-14-23 and 24 Set a sandstone 18 x 10 x 6 in. 12 in. in the ground for closing cor. of secs. 13 and 14 marked C.C. cor. N. with 1 groove on E. and 5 grooves on W. faces; raised a mound of stones 2 ft. base 1$\frac{1}{2}$ ft. high N. of cor. Pili impactable And destroy markings on cor. of secs 13-14-23 and 24 pertaining to secs 13 and 14</p>

Subdivision of T. 38 S R. 11 W

chains	<p>Land mountainous very broken - rolling plateau soil gravelly and rocky 3rd rate No timber. Dense undergrowth of oak aspen and cherry Mountainous land 11.8, 62 chs. -</p>
24, 66	<p>From the cor. of secs. 11-12-13 and 14 which is a stone firmly set marked and witnessed as described by the surveyor general. Run S. East E. on a random line bet. secs. 12 and 13. Set temp. $\frac{1}{4}$ sec cor.</p>
64, 01	<p>Intersected Holob Guide meridians and E. bdy of Tk. 1, 60 chs. S. of cor. of secs. 11 and 12 which is a stone firmly set marked and witnessed as described by the surveyor general Set a sandstone 18x11x6 in. 12 in. in the ground for closing cor. of secs. 12 and 13 marked C C on N. with 2 grooves on N. and 4 grooves on S. faces.; raised a mound of stones 2 ft. base 1$\frac{1}{2}$ ft. high N. of cor. Pili impracticable.-</p>
	<p>Thence 0 run West over a true line bet. secs. 12 and 13 On mountainous land</p>
20, 25	<p>Descending gradually over rolling plateau Bottom of gulch crossed at 200 ft below cor. Ascending on broken surface to</p>
28, 60	<p>Top of spur N 100 ft high and beginning of descent</p>
40, 00	<p>Set a sandstone 26x11x6 in. 19 in. in the ground for $\frac{1}{4}$ sec cor. marked $\frac{1}{4}$ on N. face; raised a mound of stones 2 ft. base 1$\frac{1}{2}$ ft. high N. of cor. Pili impracticable</p>
46, 00	<p>Bottom of gulch crossed N. E. 120 ft below spur Ascending on S E slope to</p>
64, 01	<p>The cor. of secs. 11-12-13 and 14 This cor. stands 115 ft above bottom of gulch Land mountainous, rolling high plateau Soil gravelly 3rd rate No timber Aspen and oak undergrowth in patches</p>

Subdivision of T. 38 S. R. 11 M.

Chain Mountainous land 64.01 acs.
June 2, 1899

	June 3, 1899: at 5 ⁴ 12" a m.s.t. (Lat. off. 37.32° N. on the lat. arc 22.21" N. on the decl. arc) and determine a true meridian with the solar alt. the cor. of accs. 1-2-11 and 12 which is a stone firmly set marked and witnessed as described by the Surveyor General, thence I run East. via random line bet. sec. 1 and 12 Set Lumps $\frac{1}{4}$ sec. cor.
49.80	Intersect Hob Guide Meridian and E. bdy. of Tp. 74-23. chs. S. of N.W. cor. of Tp. 38 S. R. 11 M. as herein before described. Set a sandstone 18x9x8 in. 12 in. in the ground for closing cor. of sec. 1 and 12 Marked C.C. on N. with 1 groove on N. and 5 grooves on S. faces: raised a mound of stones 2 ft. base 15 ft. high N. of cor. Pits impracticable Thence I run West on a true line bet. sec. 1 and 12 On mountainous land Descending in dense underbrush to
12.20	Dry wash in bottom of gulch 260 ft. below cor. course N.W.
17.10	Stream 2 ft. course N. Begin steep rocky ascent
23.60	Set a black lava rock 26x12x7 in. 19 in. in ground and mound of stones on rocky surface for $\frac{1}{4}$ sec. of acc. 1 marked $\frac{1}{4}$ S. 1. on N. face: raised a mound of stones 2 ft. base 15 ft. high N. of cor. Pits impracticable
40.00	Set a black lava stone 18x9x7 in. 12 in. in the ground for $\frac{1}{4}$ sec. cor. of sec 12 marked $\frac{1}{4}$ on N. face and S. 12 on S. face: raised a mound of stones 2 ft. base 15 ft. high N. of cor. Pits impracticable Top of gulch bears N. and S. 2.75 ft. above stream Begin gradual and rolling ascent to
43.60	The cor. of accs. 1-2-11 and 12 Land mountainous broken plateau
63.60	

Subdivision of T. 38 S. 18 E. W.

chains	Soil rocky and gravelly 3 rd and 4 th rate Timber a few scattering aspen and pine on side of gulch. - Dense underbrush of aspen and cherry. Mountainous land 63,60 chs. -
10,700	From the cor of secs. 22-23-26 and 27 which is a stone firmly set marked and witnessed as described by the surveyor general I run $N 0^{\circ} 1' W.$ bch. sec. 22 and 23 On mountainous land Ascending in dense oak brush on S.W. slope Top of spur w. 100 ft. above cor. and beginning of descent
3,185	Dry wash in bottom of gulch 250 ft below top of ridge course W.
4,000	Begin ascent Set as sandstone 18x8x6 ins. 12 ins. in the ground for 1/4 ecc. cor. marked 1/4 on N. face: raised as mound of stones 2 ft. base 1 1/2 ft. high W. of cor. - Pili impracticable
4,250	Top of spur w. 150 ft. high and beginning of descent on broken slope
76,20	Dry wash in bottom of gulch 280 ft. below spur course W.
8,000	Ascending gradually to Set as sandstone 26x9x6 ins. 19 ins. in the ground for cor of secs. 14-15-22 and 23 marked with 3 notches on S and 2 notches on E edges: raised as mound of stones 2 ft base 1 1/2 ft. high w. of cor. Pili impracticable Land mountainous very broken Soil gravelly 3 rd rate No timber Dense oak brush the whole distance Mountainous land 8,000 chs. -
	June 3 rd 1899: The sky being overcast during the noon hour I could not observe the sun on the meridian. -
	East on a random line bch. sec. 14 and 23.

Subdivision of T 38 S 17 W.

chain 4000	Set bench $\frac{1}{4}$ sec cor.
79.96	Intersect N. and S. line at cor. of secs. 15-14-23 and 24 Then $\frac{1}{4}$ sec West on a true line bet. secs 14 and 23. On mountainous land Descending steep broken slope in dense brush
39.74	Road from Kanarraville to Virgin River bears N and S
39.98	Set a sandstone $18 \times 8 \times 6$ ins. 12 ins. in the ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ sec. N. face raised a mound of stones 2 ft. base 12 ft. high N. of cor. Pits impracticable An oak tree 4 ins. diam. bears $5.74^{\circ} 0' E$ 7 lbs. dust marked $\frac{1}{4} S 23$ G.T.
79.96	The cor. of secs. 14-15-22 and 23 This cor. stands 725 ft. below the cor. of secs 13-14-23 and 24 Land mountainous, broken, and steep slope soil gravelly 3 rd and 4 th rate No timber Dense oak and cherry brush the whole distance Mountainous land 79.96 chs
	From the cor. of secs. 10-11-14 and 15 which is a stone firmly set marked and witnessed as described by the surveyor general O. run $50^{\circ} 1' E$ bet. secs. 14 and 15 On mountainous land Descending on broken surface, through dense underbrush
36.90	Le Verkeis Creek 5 lbs wide course $5.25^{\circ} W.$ in narrow channel 30 ft deep and 420 ft. below cor. Begin ascent
38.75	Top of channel and spur N. and beginning of descent on broken N. slope
40.00	Set a sandstone $18 \times 11 \times 5$ ins. 12 ins. in the ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ sec. N. face, from which An oak tree 6 ins. diam. bears $1.55^{\circ} W.$ 7 lbs. dust

Subdivision of T 38 S R 11 W.

chains	marked 745.15 B.T.: all other lines within limits Raised at interval of stones 2 ft. base 1½ ft. high N of cor. - Pits impracticable
54,60	Bottom of draw 90 ft. deep. course 580°W
65,60	Ravine 40 ft. deep. course N 70°W.
73,35	Road from Kanarraville to Virgin River course N 75°W and S 75°E
78,75	Duffin Bros fence bears N. 75°W. and S 75°E; this fence runs to the creek bank, and, breaks which each forms impassable barrier to stock Duffin Bros Loghouse bears S 78°40' E 33,00 chs. -
83,00	Bottom of gulch course 580°W 60 ft. deep. and. beginning of gradual ascent on broken surface sloping N.
99,50	Top of spur N. 100 ft. high Descending to
114,45	Bottom of ravine 140 ft. deep. course S. 75°W. Begin ascent
132,00	Top of spur N. 210 ft. high and beginning of gradual descent to
138,45	Cutterect N. 14 deg of sec 23. 14.97 chs. E. of cor. of secs. 14-15-22 and 23. on which U. S. C. S. markings for cor. 14 and 15 below sandstone 18 x 10 x 7 ins. 12 ins. in the ground for closing cor. of secs. 14 and 15 marked C.C. on N. with 2 grooves on E. and 4 grooves on W. faces; raised at interval of stones 2 ft. base 1½ ft. high N of cor. - Pits impracticable Land mountainous broken and sloping Soil gravelly & stony No timber Dense oak brush undergrowth the whole distance Mountainous land 150,45 chs. -

June 3, 1899

June 4, 1899: at the cor. of secs. 34-33 and 34 on
S. side of T.P. which is a stone firmly set marked and
witnessed as described by the surveyor general; at
8410 m a m, 7 m & 9 set off 3702 6' N. on the lat. arc
22°28' N. on the decl. arc and determine a true
meridian with the solar. thence I read
N 0° 2' W. bet. secs. 33 and 34

Subdivisions of T 38 S 12 W.

chain	On mountainous land Descending in dense brush on broken slope
27,00	Edge of perpendicular break to box canyon 400 ft. deep course N. E and S. W. and further chaining is impossible therfor I set a flag at this point on line and measure a baseline N 89° 58' E 6.00 chas. to a flag, and go to a point on the opposite side of canon, where flag on line bears S 0° 2' E and flag at E end of base bears S 38° 37' E. hence dist. $38^{\circ}37' \times 6,000 : : : = 7.52 + 27,00 =$ N. W. edge of box canon, course N E and S. W.: the bottom of the canon is a narrow rocky gorge and a dry wash draining S. W. Begin ascent on broken slope
34.52	Set a sandstone 18 x 10 x 9 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 owl w. face; raised a mound of stones 2 ft. base 1 1/2 ft. high N. of cor. Pitt impracticable
4,000	Top of ridge bears N E and S W. 400 ft above edge of canon Begin descent
78,00	Set a sandstone 18 x 11 x 7 ins. 12 ins in the ground for cor. of secs. 27-28-33 and 34 marked with notch on S and 3 notches on E. edges; raised a mound of stones 2 ft. base 1 1/2 ft. high N. of cor. Pitt impracticable. - Land mountainous very broken Soil gravelly and rocky & erratic Timber: a few pine trees scattering Dense oak brush the whole distance Mountainous land 8,000 chas. -
4000	East on a random line bet. secs 27 and 34 Set Linch. 1/4 sec. cor.
79.82	Intersect N and S line 21 lbs. N of cor. of secs. 26- 27-34 and 35 which is a stone firmly set marked and witnessed as described by the surveyor general. Thence 1/4 mi. N 89° 57' W. on a true line bet. secs 27 and 34 On mountainous land Descending on broken rocky slope in dense oak brush

Subdivision of T 38 S 12 11 W.

chains	
20.30	Edge of rocky ravine course N. E. and S. W.
24.12	Dry wash in bottom of ravine 280 ft. deep drains S. W. Ascending steep rocky slope to
28.60	Top of ravine and beginning of rolling ascent course N. E. and S. W.
39.91	Set a sandstone 18 x 10 x 6 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face; raised a mound of stones 2 ft. base 1 1/2 ft. high N. of cor. Pili impracticable. —
77.40	Top of ridge bears N. E. and S. W. 350 ft above ravine Begin descent to
79.82	The cor. of secs 27-28-33 and 34 Land mountainous very rugged Soil gravelly and rocky at the rate No timber Dense oak brush the whole distance Mountain land 79.82 chs. —
	June 4, 1899: At this cor. I set off 22° 29' N. or the decl. arc and at 114 58m a. sec. (not observed) the sun on the meridian; the resulting lat. is 37° 27' N. —

chains	N 0° 2' 15. 66. secs 27 and 28
18.68	On mountainous land Descending on broken slope in dense oak brush Edge of perpendicular break to canon 300 ft deep. course N. E. and S. W.
20.50	Neckin 3 chs. wide in bottom of canon course S. E. Begin ascent on steep rocky slope to
28.00	Top of canon bears N. E. and S. W. 180 ft. lower than top on opposite side
40.00	Begin steep ascent on broken slopes Set a sandstone 18 x 11 x 6 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face; raised a mound of stones 2 ft. base 1 1/2 ft. high N. of cor. Pili impracticable.
76.50	Ascent becomes gradual course E and W.
80.00	Set a sandstone 26 x 11 x 10 ins. 19 ins. in the ground for cor. of secs. 21-22-27 and 28 marked with 2 notches on S and 3 notches on E. edges; raised

Subdivision of T. 38 S. R. 112 W.

chain	a mound of stones 2 ft. base 1½ ft. high w. of cor. Pits impracticable
11,37	This cor. stands 600 ft. above top of cañon Land mountainous very rugged Soil rocky and gravelly 3rd and 4th rate No timber. - Dense oak brush. Mountainous land 8,000 chs. -
40,00	S 89° 51' E on a random line bet. secs. 22 and 27 Set temp 1/4 sec. cor.
80,10	Intersection of and 5 line 20 chs. S. of cor. of secs. 22-23 26 and 27 as hereinbefore described Thence S. 30° E West on a line line bet. secs. 22 and 27 On mountainous land Descending on rolling slope
16,50	Head of gulch drains S.W. 150 ft. below cor. Begin ascent
20,00	Top of spur 5 m. 60 ft. high and beginning of descent
29,50	Bottom of gulch course S.W. 120 ft. below spur, Begin gradual ascent on S slope
49,05	Set at sandstone 18 x 9 x 8 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on st. face; raised w mound of stones 2 ft base 1½ ft. high b. of cor. Pits impracticable
44,00	Log Cabin at Birch Springs, bears S 52° W. 10,75 chs. Spring close by cabin flows s. a tiny stream which rises in a few chs. - To S.W. of cabin is about 3 acres inclosed by fence and used as pasture Cabin not occupied: claimant unknown
68,00	Top of spur 5.100 ft high Begin descent to
- 80,10	The cor. of secs. 21-22-27 and 28 This cor. stands 140 ft. below top of spur Land mountainous broken and rolling Soil gravelly and rocky 3rd and 4th rate No timber. Dense oak brush Mountainous land 8,010 chs. -

June 4, 1899

Subdivision of T 38 S 12 W.

chains	June 5, 1899 I run 4002' N. bet. secs. 21 and 22 On mountainous land Ascending gradually on broken W. slope in dense oak brush.
136.0	Top of spur or 100 ft. above cor. and beginning of descent
21.00	Bottom of ravine drain 5600 W 160 ft. deep Ascending to
40.00	At a sandstone 18x10x6 in. 12 in. in the ground for 1/4 sec cor. marked 4400 W. face raised as mound of elms 2 ft. base 15 ft. high N. of cor. Pili impracticable
42.00	Top of spur or 200 ft. above ravine and beginning of descent on broken slope
77.50	Beginning of abrupt descent on low slide soil
79.35	Le Verrier Creek 6 ft. wide course S 55 E. in narrow channel 400 ft below top of spur Begin ascent on steep bank and loose soil
80.00	At a sandstone 26x10x6 in. 19 in. in the ground for cor. of secs. 15-16-21 and 22 marked 385 on N.E. and N.W. on S.E. faces; with 3 notches on S and E edges from which a live cedar tree 14 in. diam. bears S 88° 40' E 129 chs. dist. marked T 38 S R 11 W 52 213 T. No other trees within limit varied a mound of elms 2 ft. base 15 ft. high N. of cor. Pili impracticable Land mountainous broken Soil gravelly and rocky & erratic No timber Dense oak brush undergrowth - 80,000 chs. Mountainous land 80,000 chs. -

June 5, 1899, at 9:30 a.m., I set off 37° 29' 30" N
on the lat. arc 22° 35' E. on the decl. sec. and
determine a true meridian with the solar at
the cor. of secs 15-16-21 and 22; thence I run
East on a random line bet. secs 15 and 22
bet. line 44 sec cor.
Intersect N. and S. line 7 chs. S. of cor. of secs. -

Subdivision of T 38 S 18 11 W.

	chain 1 - 22 and 23
	Thence down S 89° 57' W. on a line bet. sec. 15 and 22
	On mountainous land
	Descending on broken slope in dense oak brush
5,30	Dry wash and bottom of gulch course N.W. Begin ascent
9,65	Top of spur N.W. 55 ft. high and beginning of descent
21,30	Bottom of gulch 100 ft below spur course N 30° W Ascending in
25,30	Top of spur N. 30° W 50 ft high and beginning of descent
40,00	Set a limestone 18 x 10 x 6 ins. 12 ins. in the ground for 1/4 sec cor marked 1/4 on N. face raised a mound of stones 2 ft. base 1 1/2 ft. high N of cor. Pili impracticable
46,00	Bottom of gulch 200 ft deep. course N.W. and road from Kanarraville to Staples' ranch course N.W. and S.E. - In the bottom of this gulch which widens somewhat above this point is two shallow ponds fed by springs and covering about an acre each. - Course about S 25° E 40,000 chs. Begin ascent
47,24	James Staples' cabin bears S 47° 16' E 23,000 chs.
51,14	Top of spur 60 ft. high and beginning of descent on broken slope to
78,00	LeVerkin Creek 6 chs wide in bottom of narrow ravine course S 60° W 300 ft below tip of spur Placed on steep, loose bank of creek to
80,00	The cor. of secs. 15-16-21 and 22. Land mountainous very broken Soil gravelly 3rd rate No timber Dense oak brush undergrowth Mountainous land 80,000 chs. - June 6, 1899. At this cor. I set off 22° 36' N. on the decl. arc. and at 114 68 m a m, I must observe the sun on the meridian: the resulting lat. is 37° 29' 36" N.

Subdivision of T 38 S R 11 W.

chain	From the 1/4 sec cor. bet. secs 15 and 16 which is a stone firmly set marked and situated as described by the surveyor general. I run S 0° 2' E. bet secs 15 and 16
18.05	On mountainous land Descending on gradual rolling slope, in dense undergrowth and scattering pine trees Stream 2 1/2 ft wide flows S 65° E
28.80	New unfinished cabin bears East 21.75 chs. located on w. side of a pond or reservoir covering about 1/2 acre not occupied and owner not known
51.50	Begin steep descent, course N 75° W and S 75° E Leaves scattering pines
63.90	Cabin claimed by John Williams bears N. 18,10 chs. located in the S. E. cor. of about 5 acres inclosed by fence and partly cultivated; a spring bears N. from the cabin about 7 chs. draining S.E. but sinks in about 4 chs. -
74.30	Dry wash and bottom of gulch 30 ft deep, course S E
83.25	Road from Hanoverville to Statley's ranch course N.W. and S E
114.03	Le Verkin Creek 6 chs wide in narrow channel 50 ft. deep and 800 ft below the 1/4 sec cor. course S 70° W. Begin steep broken ascent to
118.51	Intersect N. side of sec. 22 14,66 chs. N 89° 57' E of cor. of secs. 15-16-21 and 22 Set a sandstone 18 x 10 x 6 in. 12 in. in the ground for closing cor. of secs. 15 and 16 marked C.C. on it with 3 grooves on E and W. faces: raised a mound of stones 2 ft. base 1 1/2 ft high N. of cor. Pitt impracticable. - This cor. stands 75 ft. above creek Land mountainous very broken Soil gravelly 3rd and 4th ratio Timber, a few scattering pine Dense oak and birch brush Mountainous land 118.51 chs. - I destroy all markings on cor. of secs. 15-16-21 and 22 pertaining to cor. 15 and 16. -
	June 6, 1899

June 6, 1899, at 8:43 AM, I set off.

Subdivision of T 38 S R 11 W.

chain'd	37° 26' N on the lat. arc 22° 41' N. on the decl. arc and determine a true meridian with the solar at the cor. of secs. 4-5-32 and 33 on 3dly of Tp. Thence I run N 0° 3' W. bet. secs. 32 and 33 On mountainous land Descending gradually on broken slope in dense Oak brush
15,60	Edge of perpendicular break to canon 400 ft. deep bears E. and W. and further chaining is impossible I therefore set a flag at this point on line and measure a baseline at 89° 57' E 16.75 chs. to a flag I now go to the opposite side of canon to a point where flag set on line bears. 50° 3' E and flag at E. end of baseline bears 531° 14' E hence: Ctan. 31° 11' x 16.75 = 27.68 + 15.50 =
43/18	N. W. edge of canon course N.E. and S.W. 400 ft. deep, perpendicular wall Set a sandstone 18 x 9 x 7 in. 12 in. in the ground for witness cor. to 1/4 sec. cor. which falls in the canon and can not be set marked W.C. 1/4 in W. face: raised a mound of stones 2 ft. base 1/2 ft. high W. of cor. Pili impracticable Thence ascending on broken slopes to
- 80,000	Set a sandstone 18 x 12 x 11 in. 12 in. in the ground for cor. of secs. 28-29-32 and 33 marked with 1 notch on S. and 4 notches on E edges: raised a mound of stones 2 ft. base 1/2 ft. high W. of cor. Pili impracticable This cor. stands 400 ft. above the edge of the canon Land mountainous very rugged Soil gravelly and rocky 4th rate Timber. a few pine trees scattering Dense thorn and oak brush underneath the whole distance Mountainous land 8,000 chs. -
40,000	East on a random line bet. secs. 28 and 33 Set 1/4 sec. cor.

Subdivision of T 38 S 12 W.

Chain

43.00

Edge of perpendicular break to canon 400 ft. deep
bears N E and S W. and further chaining is
impossible; I therefore set a flag on the random
line at this point and measure off a baseline
north 9.65 chs. to a flag. I now go to the
opposite edge of the canon to a point where
flag on random line bears. West, and flag
on N. end of baseline bears $44^{\circ} 55' W.$ hence:

$$\text{Chain. } 43^{\circ} 5' \times 9.65 = 10.32 + 43. -$$

53.32

East edge of canon, thence on random line to
intersect N and S line 15 M.R. S. of cor. of secs.
27-28-33 and 34

Thence 0 run.

$1189^{\circ} 54' 25''$ on a true line bet. secs. 28 and 33

On mountainous land

Descending on broken slope in dense oak
and thorn undergrowth

26.90

Edge of perpendicular break to canon 400 ft. deep.
course N.E. and S.W.

32.00

Stream 400 ft. wide in bottom of canon course S. (estimated)

37.22

W. edge of canon course N.E. and S.W. and
beginning of ascent on broken slope

40.11

Set a roundstone 21 ft. 1 x 9 ins. 15 ins. in the
ground for 1/4 sec cor. marked 1/4 on N. face;
raised a mound of stones 2 ft. base 1 1/2 ft high
S. of cor. Pits impracticable

63.00

edge of ravine 100 ft. deep course S

80.22

The cor. of secs. 28-29-32 and 33

This cor. stands 380 ft. above edge of canon

Land mountainous very rugged

Soil gravelly and rocky 4 ft. rate

Pines, a few scattering pine trees

Dense oak and thorn undergrowth

Mountainous land 80.22 chs. -

June 6, 1899: At this cor. I set off $22^{\circ} 42' 15''$
on the decl. arc and at 11:15 a.m., G.M.T.
observed the sun on the meridian; the
resulting lat. is $37^{\circ} 27' 15'' N.$

$110^{\circ} 3' W.$ bet. secs 28 and 29

Subdivision of T 38 S 18 W.

	chain	On mountainous land
		According on broken slope in dense oak brush.
1500		Top of ridge bears N.E and S.W. 155 ft. above cor.
		Began descent on broken slope
4000		Set a sandstone 18x9x7 ins 12 ins in the ground for 1/4 sec. cor. marked 1/4 on w. face; raised a mound of stones 2 ft. base 1 1/2 ft. high W. of cor. Pits impracticable
5500		Enter fine timber course E and w.
68,70		Edge of break 75 ft. deep coarse E and w.
59,95		Bottom bottom of ravine coarse W. and dry wash 600 ft. below top of ridge
		Began abrupt ascent on rocky slope
61,00		Top of ravine bears E and w. and beginning of steep broken ascent
		Leave timber course E and w.
77,00		Top of spur S.W. thence on steep w. slope to
80,00		Set a limestone 18x11x9 ins 12 ins. in the ground for cor. of sec. 20-21-28 and 29 marked with 2 notches on 5 and 4 notches on 6 edges; raised a mound of stones 2 ft. base 1 1/2 ft. high W. of cor. Pits impracticable
		This cor. stands 210 ft above the ravine
		Land mountainous very rugged
		Soil gravelly and rocky 4 ft. matto
		Timber fine mainly scattering
		Dense thorn and oak brush undergrowth
		Mountainous land 80,00 class. -
		589-5'4'E on a random line bet. sec. 21 and 28
40,50		Set 100 ft. 1/4 sec cor.
79,94		Crossed it and s line 18 ft. S of cor. of sec. 21-22-27 and 28
		Thence down
		5890-5'8'W. on a line bet. sec. 21 and 28.
		On mountainous land.
39,06		Descending on rolling slope in dense oak brush.
		Dry wash 10 ft. deep and bottom of slope 280 ft. below cor. course 5.60'2d.
		Began ascent
39,95		Set a sandstone 18x12x11 ins. 12 ins. in the

Subdivision of T 38 S R 11 W.

chain	ground for 1/4 sec cor. marked 14 on it. face raised a mound of stones 2 ft. base 1 1/2 ft. high N. of cor. Pit impracticable
46,00	Top of spur 3.20. 60 ft. high and beginning of steep descent
66,15	Bottom of gulch 375 ft. deep course S. W. Begin ascent on steep slope
77,00	Top of sharp ridge bears E. and S. W. 250 ft. high Begin abrupt descent in slide rock
79,96	The cor. of secs. 20-21-28 and 29 This cor. stands on st. slope 100 ft. below top of ridge Land mountainous very rugged soil gravelly and rocky 4th rate - no timber Dense oak brush and thorn undergrowth Mountainous land 7996 chs. -

June 6, 1899

	June 7 1899. I know N 0° 3' 0". beh. secs. 20 and 21 On mountainous land
17,70	Descending on N W slope in dense brush to Verkin Creek 6 chs wide course S W. in bottom of steep narrow gulch 280 ft. below cor. Begin ascent on rocky slope
40,00	Set a sandstone 18 x 9 x 6 in. 12 in. in the ground for 1/4 sec. cor. marked 14 on W. face; raised a mound of stones 2 ft. base 1 1/2 ft. high N. of cor. Pit impracticable
41,50	Top of slope and spur N. 400 ft above creek. and beginning of gradual descent on st. slope
64,90	Bottom of rocky ravine 200 ft. deep drains S 60° W.
	Begin ascent on broken slope to -
80,00	Set a sandstone 18 x 9 x 7 in. 12 in. in the ground for cor. of secs. 16-17-20 and 21 marked with 3 notches on S and 4 notches on E. edges; raised a mound of stones 2 ft. base 1 1/2 ft. high N. of cor. Pit impracticable -
	This cor. stands 220 ft. above bottom of ravine

Subdivision of T. 30 S. 19 N.

chain	Land mountainous very rugged soil rocky and gravelly 4th rate. No timber Dense oak brush and thorn undergrowth - Mountainous land 80,000 acs.
June 7. 1899: at 9 ^h 32 ^m . a.m., I set off 97° 29' 30" N. on the lat. arc 22° 47' 30" N. on the decl. arc and determine a true meridian with the solar at the cor. of sec. 16-17-20 and 21. Hence I run	A 89° 58' E on a random line bet. sec. 16 and 21
4000	Set length. 1/4 sec. cor.
80,04	Intersect it and S line 8 lks. N of cor. of sec. - 21 and 22
	Hence I run A 89° 59' W. on a true line bet. sec. 16 and 21 On mountainous land Descending gradually on N side of creek channel very broken, and dense oak brush
2000	Head of ravine draining S. and beginning of ascent
03.40	Top of spur 5150 ft. above ravine Begin descent on broken slope
40,02	Set a sandstone 24 x 8 x 6 ins. 18 ins. in the ground for 1/4 sec. cor. marked 1/4 on its face raised as mound of stones 2 ft. base 1/2 ft. high N of cor. Both impracticable
67,00	Bottom of gulch and dry wash course. S. N. 300 ft. below spur. - Begin ascent
80,04	The cor. of sec. 16-17-20 and 21. This cor. stands on top of a spur 5. and 100 ft. above gulch
	Land mountainous very rolling and broken soil gravel, clay, and rocky. 4th rate No timber Dense oak brush undergrowth - Mountainous land 80,000 acs.
	June 7. 1899 at this cor. I set off 22° 47' 30" N. on the decl. arc and at 11 ^h 57 ^m a.m., I set off 97° 29' ^m .

Subdivision of T. 38 S R 11 W.

chains

on the meridian; the resulting lat is $37^{\circ} 29'$
 $30''$ N

From the 1/4 sec cor. bet. secs. 16 and 17 which is
 a stone firmly set marked and witnessed
 as described by the surveyor general Ordn
 $50^{\circ} 3' E$ bet. secs. 16 and 17

On mountainous land

Descending gradually on broken S.W. slope
 in dense undergrowth -

22,00 Top of spur S.W. and beginning of steep
 descent

47,20 Bottom of gulch course S.W. 320 ft below
 1/4 sec. cor.

Ascending to

80,00 Top of ridge course S.W. and N.E. 350 ft high
 Begin descent

112,75 Bottom of wash 10 ft deep. 290 ft below top of
 ridge

Ascending to

118,56 Intercept N bdy. of sec. 21 14,40 chs. $589^{\circ} 37' E$
 of cor. of secs. 16-17-20 and 21

Set a sandstone 18 x 10 x 7 in 12 in. in the
 ground for closing cor. of secs. 16 and 17
 marked C.C. on N. face with 2 grooves on W.
 and 4 grooves on E faces; raised a mound
 of stones 2 ft base 1½ ft. high N. of cor.
 Pili impracticable. -

Land mountainous broken steep slopes

soil gravelly 4th rate

No timber

Dense oak brush undergrowth -

Mountainous land 118.56 chs. -

I decline markings on cor. of secs. 16-17-20
 and 21 pertaining to secs. 16 and 17

June 7, 1899

June 8, 1899: at the cor. of secs. 5-6-31 and 32
 on S. bdy. of Th. I set off $37^{\circ} 26' N$. on the lat. arc
 $22^{\circ} 53' N$. on the decl. arc. and at 8⁴ 6⁶ m. a.m.
 L.M.T. determined a true meridian with the

Subdivision of T 38 S R 11 W.

Chaines	sold Thence Onw N 0° 3' W bet. secs. 31 and 32 On mountain land
19.50	Descending on steep broken slope in dense oak brush Edge of perpendicular break 400 ft. deep to Lc Verkin Cañon course S.W. and N.E. and further chaining is impossible. I therfor place a flag on line at this point and measure a baseline N 89° 57' E 11.10 clrs. to a flag; I now go to the opposite side of cañon to a point where flag set on line bears S 0° 3' E and flag at E. end of baseline bears S. 36° 16' E. hence cor. tan. 36° 13' X 11.10 = $15.76 + 19.50 =$
3466	N.W. edge of Lc Verkin Cañon course N.E. and S.W. 450 ft. deep with creek flowing S.W. along its course -- Begin ascent on broken slope to
40.00	Set a sandstone 18x11x7 ins. 12 ins. in the ground for 1/4 sec cor. marked W 200 ft. face: raised a mound of stones 2 ft. base 1 1/2 ft. high W. of cor. Pits impracticable
40.00	Top of slope and spur S 60° E 200 ft. above edge of cañon and beginning of descent
62.52	Bottom of ravine 100 ft. deep course S 66° E ascending on steep broken slope to
80.00	Set a sandstone 18x10x7 ins. 12 ins. in the ground for cor. of secs. 29-30-31 and 32 marked with 1 notch on S and 5 notches on E. edges: raised a mound of stones 2 ft. base 1 1/2 ft. high W. of cor. Pits impracticable This cor. stands on top of spur running S 60° E 250 ft. above ravine Land mountainous very rugged Soil gravelly and rocky 40% rate No timber Dense thorn and oak brush undergrowth Mountainous land 8,000 clrs. -
35.00	East on a random line bet. secs. 29 and 32 Edge of perpendicular break to Lc Verkin Cañon 400 ft. deep course N.E. and SW and further chaining

Subdivision of T 38 S 18 W.

- chain in impossible & therefore set a flag on the random line at this point and measure a baseline north 9.70 chs. to a flag - I now go to a point on the opposite side of the canon where the flag set on random line bears West and flag at it. end of baseline bears N. 59° 36' W. Therefore cor. $30^{\circ} 24' \times 9.70 : = 16.5' 4 + 35 = 50$
 On random line whence at
 80,20 Intercept N and S line at cor. of secs. 28-29-
 32 and 33
 Thence I run
 West over a tree line betw. secs. 29 and 32
 On mountainous land.
 Ascending on broken slope in dense undergrowth
 15,50 Top of ridge bears N. E. and S. W. 140 ft. above cor.
 Begin descent
 28,66 Edge of perpendicular break to Lc Verkies Canon
 450 ft. deep course N. E. and S. W. and further
 chaining is impossible
 Set a sandstone 18x10x9 in. 12 in. in the
 ground for witness cor. to 1/4 sec. cor. which falls
 in the canon and can not be ext. marked W.C.
 1/4 on N. face: raised a mound of stones 2 ft.
 base 1 1/2 ft. high E. of cor. Pits untraceable
 46,20 West edge of perpendicular break to canon course
 N. E. and S. W.
 Set a sandstone 18x10x9 in. 12 in. in the
 ground for witness cor. to 1/4 sec. cor. marked
 W.C. 1/4 on N. face: raised a mound of stones
 2 ft base 1 1/2 ft. high W. of cor. Pits untraceable
 Ascending on steep broken slope
 80,20 The cor. of secs. 29-30-31 and 32
 Thin cor. stands 350 ft. above edge of break
 Land mountainous very broken.
 Soil rocky and gravelly 4th rate
 No timber
 Dense thorn and oakbrush undergrowth
 Mountainous land 80,20 chs. -
 June 8, 1899: At this cor. I set off 22° 53' 30" ft
 on the decl. arc and at 11.459 m a m, I first observed
 the sun on the meridian. the resulting lat.

Subdivision of T 38 S R 11 W.

chains	is 37°27' W.
40.00	West on a random line betw. secs. 30 and 31 Set bench. $\frac{1}{4}$ sec. cor.
66.87	Intersect NW bdy. of Twp. 18 N.W. of cor. of secs. 25-30-31 and 36 <i>Thence Due</i> $N 89^{\circ} 5' 1'' E$ on a true line betw. secs 30 and 31 On mountainous land Ascending in dense oak brush and thorn
12.00	Top of ridge bears $N 10^{\circ} W.$ and $S 10^{\circ} E$ 80 ft. above cor. Begin descent on broken slope
26.87	Set a sandstone 18x11x6 in. 12 in. in the ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on it faced raised a mound of stones 2 ft. base $1\frac{1}{2}$ ft. high N. of cor. Pits impracticable
35.60	Bottom of gulch 230 ft. deep course $560^{\circ} E$ Begin ascent to
- 66.81	The cor. of secs. 29-30-31 and 32 This cor. stands 280 ft. above gulch Land mountainous very rugged Soil gravelly and rocky 4 th rate No timber Dense thorn and oakbrush undergrowth Mountainous land 66.81 circ. —
36.00	$N 0^{\circ} 3' W.$ betw. secs 29 and 30 On mountainous land Descending on broken slope in oak brush and thorn Bottom of gulch 300 ft. deep course $575^{\circ} E$.
40.00	Set a sandstone 18x11x9 in. 12 in. in the ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on N. faced: raised a mound of stones 2 ft. base $1\frac{1}{2}$ ft. high W. of cor. Pits impracticable
64.00	Top of slope and ridge, bears E and W. 210 ft. above gulch.—
	Begin steep descent and
	Earlier pine timber course E and W.
74.04	Bottom of narrow rocky ravine 400 ft. below ridge course N. $70^{\circ} E$.

Subdivision of T 38 S R 11 W.

chains 76.00	Begin ascent on steep broken slope Leave timber course E and W.
80.00	Set a limestone 18x10x8 in., 12 in. in the ground for cor. of secs. 19-20-29 and 30 marked with 2 notches on S. and 5 notches on E edges raised a mound of stones 2 ft. base 1½ ft. high N. of cor. Pits impracticable This cor. stands on lip of a sharp spur running E. bet. ravines
	Land mountainous very rugged Soil gravelly and rocky & dry soil Timber fine of small size Dense oak brush and stone underground Mountainous land 80,000 acs. —
	June 8, 1899

40.00	June 9, 1899 I run East on a random line bet. sec. 20 and 29 Left timber 1/4 sec. cor.
80.08	Intersect N. and S. line 12 lbs. N. of cor. of sec. 20-21-28 and 29 Thened I run N 89° 55' W. on a true line bet. sec. 20 and 29
9.57	On mountainous land Descending steep rocky slope in dense brush Leave timber 1/4 sec. wide course S in bottom of narrow rocky canon 300 ft. below cor. Begin ascent
14.00	Top of rocky point between canons 175 ft. high Begin descent on rocky precipitous slope
20.40	Bottom of rocky canon and dry wash course S. E. and 160 ft. below point Begin ascent
35.00	Top of canon 300 ft. above wash; thence on broken N. slope on edge of canon, gradual ascent
40.04	Set a sandstone 18x10x8 in., 12 in. in the ground for 1/4 sec. cor. marked 1/4 sec. N. face; raised a mound of stones 2 ft. base 1½ ft. high N. of cor. Pits impracticable.
56.00	Top of slope and about N. and beginning of descent
67.00	Bottom of rocky ravine 190 ft. deep; course N. 70° E

Subdivisions of T 38 S R 11 W.

		Begins steep rocky ascent along spur The cor. of secs. 19-20-29 and 30 This cor. stands 250 ft. above bottom of ravine Land mountainous very broken Soil gravelly and rocky 4 th rate Ridge & scattering pine trees in bottom of cañons Dense oak brush and thorn undergrowth Mountainous land 8,008 chs.—
	5,895.1' W on a random line bet. secs 19 and 30	
4,600	at which 1/4 sec. cor.	
6,654	Intersect N. bdy. of Th. 17 th. S of cor. of sec. 19-24-25 and 30 Thence I run East on a true line bet. secs 19 and 30 On mountainous land Ascending gradually in dense oak brush Top of ridge bears E and W.	
12,00	Begins descent on steep N.E. slope 2ct w black lava rock 18x10x6 ins. 12 ins. in the ground for. 1/4 sec. cor. marked 1/4 on N. face: raised on mound of stones 2 ft. base 1 1/2 ft. high N. of cor. Pit impracticable	
26,54	The cor. of secs. 19-20-29 and 30 This cor. stands 250 ft. below the cor. of secs. 19-24-25 and 30 Land mountainous very broken Soil gravelly and rocky 4 th rate No timber Dense oak brush and thorn undergrowth Mountainous land 6,654 chs.—	
	July 9, 1879: The weather being cloudy during the noon hour I could not observe the sun on the meridian	
	10° 3' N. bet. secs. 19 and 20.	
9,69	On mountainous land Descending steep slope in dense oak brush Bottom of rocky ravine 220 ft. below cor. line SE. Begin ascent.	
20,37	Top of spur 570° E. 480 ft. above ravine	

Subdivision of T 38 S 12 P. W.

chains	Begins descent on broken slope
40.00	Set a sandstone 18 x 11 x 9 ins. 12 ins. in the ground for $\frac{1}{4}$ sec cor. marked $\frac{1}{4}$ cor. st. face raised a mound of stones 2 ft. base 1 $\frac{1}{2}$ ft. high N. of cor. Pin impracticable
43.10	Bottoms of ravine 130 ft. deep course 8.70% According to
58.00	Top of spur E. 200 ft. above ravine and beginning of descent on it or slope to
60.00	Set a sandstone 18 x 9 x 8 ins. 12 ins. in the ground for cor. of secs. 17-18-19 and 20 marked with 3 notches on S and 5 notches on E. edges from which an oak tree 10 ins. diam. bears N 72° 34' W. 1.63 chs. dish marked T 38 S 12 11 W. S. 18 13. T. No other trees within limit; raised a mound of stones 2 ft base 1 $\frac{1}{2}$ ft. high N. of cor. Pin impracticable.
	This cor. stands 200 ft. below top of spur Land mountainous very rugged soil gravelly and rocky & erratic, no timber Dense oak brush undergrowth mountainous land 8000 chs. —

June 9, 1899: At 3 $\frac{1}{2}$ 10th fs m, I set back off 37° 29' 30" ch on the lat. arc 22° 5' 30" N. of the decl. arc and determine a true meridian with the solar at the cor. of secs. 17-18-19 and 20 thence I run S 89° 5' 5" E on a random line bch. secs 17 and 20

40.00	Set bench. $\frac{1}{4}$ sec cor.
79.90	Intersect N and S line 12 chs S. of cor. of secs. 20 and 21 1 $\frac{1}{2}$ chs
	Third I run West on a line line bch. sec. 17 and 20 on mountainous land.
13.80	Descending steep rocky slope in oak brush Dry wash in bottom of canon course S; at junction of rocky ravine from N 75° W. 800 ft.

Subdivisions of T 38 S R 11 W.

chain	below cor. begin ascent on steep rocky slope
25.00	Top of canon bears N 75° W. and S 75° E 320 ft. above cor. Begin gradual ascent
39.95	Set a sandstone 18x8x7 in. 12 in. in the ground for 1/4 sec. cor. marked 1/4 on N. face; raised a mound of stones 2 ft. base 14 ft. high N. of cor. - Its insuperable Top of spur N. 400 ft. above lip of canon, descending The cor. of secs. 17-18-19 and 20
76.50	Land mountainous very broken - Soil gravelly sterile No timber
79.90	Mountainous land 79.90 chd. - June 9, 1899
79.90	(June 10, 1899 at 8:45 a.m., 2nd set off 37° 29' 30" N on the lab. arc 23° 23' 40" on the decl. arc and determine a true meridian with the solas at the cor. of secs. 17-18-19 and 20 Pierce I run
40.00	West on a random line bet. secs 18 and 19 Set cor. 1/4 sec. cor.
60.50	Crosscut N. side of Th. at cor. of secs. 13-18- 19 and 24
71.6	Pierce I run East on a line into bet. secs. 18 and 19 On mountainous land Descending in dense oak brush
76.50	Top of ridge bear. 5 and 5 60 ft. above cor. Begin slight broken descent
76.50	Set a sandstone 18x12x10 in. 12 in. in the ground for 1/4 sec. cor. marked 1/4 on N. face from which
	An oak tree 4 in. diam. bears S 49° 30' W. G 7 W. dist. marked 1/4 S 19 13. T.
	An oak tree 4 in. diam. bears N 66° 32' W. 70 ft. dist. marked 1/4 S 18 13. T.
	This cor. stands at the head of a draw running N 30° E. 250 ft. below top of ridge
	Begin gradual ascent
47.00	Top of spur N. 30° E. 200 ft. high Descending to

Subdivision of T 38 S R 11 W

stations	
04,45	Bottom of gulch course N 30° E 150 ft. below spud.- ascending
66,50	The cor. of secs 17-18-19 and 20 Land mountainous broken and rolling Soil gravelly and rocky 3 rd rate Timber ashaw, oak and a few pine, all of small size.— Dense, oak ashaw and maple brush Mountainous land 66,50 chs.—
	From the cor. of secs 7-8-17 and 18 which is a stone firmly set marked and witnessed as described by the surveyor general, O river S 0° 3' E bet. sec. 17 and 18
	On mountainous land Descending in broken slope in dense oak brush and thorns
8,50	Top of spur S 20° W.; thence on S. E. slope
50,00	Sed. a sandstone 18 x 11 x 6 in., 5 1/2 in. in the ground for 1/4 sec cor. marked 1/4 on N. face raised w. remains of stones 2 ft. base 1 1/2 ft. height N. of cor. Pits impracticable
62,00	Bottom of ravine course S. E. 600 ft. below sec cor. ascending to
72,60	Top of spur S. E. 145 ft. high and beginning of descent
81,45	Bottom of ravine draining E 175 ft. deep ascending to
112,10	Top of ridge bears N. W. and S. E. 300 ft above ravine descending to
125,80	Bottom of gulch course S. E. 125 ft. deep begin ascent to
134,00	Top of spur 100 ft. high runs nearly E. and beginning of descent to
149,50	Bottom of gulch draining E. 180 ft. deep and spring branch which will form a spring in bottom of gulch about 6 chs. N.
	Ascending
158,70	Intersect N. bdy. of sec. 20 14.11 chs. E. of cor. of secs 17-18-19 and 20

Subdivision of T. 38 S. R. 11 W.

chain	Set at sandstone 18 x 10 x 7 in. in ground for closing cor. of secs. 17 and 18 marked C.C. and face with 1 groove on N and 6 grooves on E. faces; raised a mound of stones. 2 ft. base 1½ ft. high E. of cor. Pits impracticable. Thin cor. stands on it & slopes in heavy oak brush. 115 ft. above bottoms of gulches. Land mountainous very broken soil gravelly and rocky 4 ft. ratio No timber Dense oak brush and thorn undergrowth. Mountainous land 158.40 acr. - I destroy all markings of cor. of secs. 17-18-19 and 20 referring to secs. 17 and 18
4,000	From the cor. of secs. 7-8-17 and 18 as hereinbefore described I run. West on a random line bet. secs. 7 and 18. Set limb 14 sec. cor.
8,009	Intersect W. bdg. of Th. 15-2 ch. S. of cor. of secs. 7- 12-13 and 18 Set at sandstone 26 x 11 x 5 ins. 19 in. in the ground for closing cor. of secs. 7 and 18 marked C.C. on E. face with 2 grooves on N and 4 grooves on S. faces: raised a mound of stones 2 ft. base 1½ ft. high E. of cor. Pits impracticable. - I destroy all markings on cor. of secs. 7-12-13 and 18 pertaining to secs 7 and 18 Thence I run
23,00	East on a true line bet. secs. 7 and 18 On mountainous land Descending on N.E. slope in dense oak brush. Rocky break to cañon bears N. 60° W. and S. 60° E. 90 ft. deep.
32,57	dry wash and bottom of cañon crossed 4600 ft. 500 ft. below cor. Begin abrupt ascent on rocky slope
40,09	Set at sandstone 28 x 10 x 7 in. 21 in. in ground and mound of stones on rocky bottom for N.E. cor. marked here it. face! raised a mound of

Subdivision of T 38 S 18 N 24.

chain 41.60	stones 2 ft. base 1½ ft. high st. of cor. Pts impracticable Foot of rocky break 80 ft high course N 60° W and S. 60° E.
42.00	Top of canon and beginning of broken ascent on S. slope
57.00	Top of spur 5. 525 ft. above bottom of canon Descending to
66.80	Bottom of ravine 100 ft deep course S 25° W ascending to
80.09	The cor. of secs. 7-8-17 and 18 This cor. stands on S W slope in dense undergrowth and 200 ft above ravine Land mountainous very rugged soil gravelly and rocky 4th rate No timber Dense oak brush and thorn undergrowth Mountainous land. 80.09 clss. -

June 10, 1899

chain 12.50	June 11, 1899 at 8 43 22 m a.m., I set off 37° 32' N. on the lat. arc 23° 5' N on the decl. arc and determine a true meridian with the solar at the cor. of secs. 5-6-7 and 8 which is a stone firmly set marked and noticed as described by the surveyor general: Then I run West bet. secs. 6 and 7 On mountainous land -- Descending on broken plateau in dense undergrowth Bottom of ravine course S. 15° W. 100 ft. deep.
21.40	ascending gradually to Top of spur 5. 80 ft high and beginning of descent
32.60	Bottom of gulch course S 15° W. 100 ft. deep ascending
40.00	Set a sandstone 18 x 11 x 6 in. 12 in. in the ground for 1/4 sec. cor. marked there it face; raised a mound of stones 2 ft. base 1½ ft. high st. of cor. Pts impracticable
47.00	Top of slope and spur S. W. and beginning of steep broken descent on S. W. slope
50.24	Inverted W. side of Tp. 7990 ch. 5 of the cor. of

Subdivision of T. 38 S. R. 11 W.

Chains	<p>T.P. 37 and 38 S. R. 11 and 12 W.</p> <p>Set a sandstone 18 x 10 x 9 in. 12 in. in the ground for closing cor. of secs 6 and 7 marked C.C. on E face with 1 groove on N. and 5 grooves on S. faces: raised a mound of stones 2 ft. base 1½ ft. high E. of cor. Pits impracticable This cor. stands 700 ft below the cor. of secs 5-6-7 and 8. -</p> <p>Land Mountainous very rugged soil gravelly and rocky 4th rate No timber</p> <p>Dense oak brush and thorn undergrowth Mountainous land 80.24 chs. -</p>
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June 11, 1899: At my camp which is located near the N. bdy. of sec 16 T. 38 S. R. 11 W. I set off 37° 31' N on the lat. arc 23° 8' N. on the decl. arc and at 34° 32' a.m., I mt determine a true meridian with the solar and mark a point thereof on a stake firmly set in the ground 500 chs. N. of my station..

At 9^h 40^m p.m., I mt observe Polaris in accordance with Manual of Instructions and mark a point in the line thus determined on a peg driven in the ground 500 chs. N. of my station..

Azimuth 2 m. t. of ob. June 11 9^h 40^m

U. C. Polaris June 10 20 06^m

Hour ang. of Polaris at observation 13° 33.6^m

Subtracted from 23° 56.1^m

True argument 10° 22.5^m

Azimuth of Polaris at ob. 0° 37' E

June 11, 1899

June 12, 1899: At 7^h 30^m a.m. I lay off the azimuth of Polaris 0° 37' to the west and mark the true meridian thus determined by a tack driven in the stake set June 11. at 500 chs. N. of my station..

At 8^h 2^m a.m., I set off 37° 31' N on the lat. arc 23° 15' N on the decl. arc and mark the true meridian determined by the solar on the

Subdivision of T 38 S 12 W.

States not 5.00 cm. S. of my station, and find that the true meridians as determined by P.m. and a.m. solar observations agree respectively within 1° of arc with the true meridians determined by observation on Polaris, and I therefore conclude the adjustments of the instrument are satisfactory

June 12, 1899

General Description

The portion of this township covered by the present survey is all mountainous land very rough and broken, and only very small, isolated patches can for that reason be cultivated. - The soil is mainly gravelly and rocky but with irrigation is quite fertile. - It furnishes excellent pasture during a short summer season but is not owing to its high elevation suitable for permanent agricultural settlement nor winter residence. - There is very little timber within the township and none of commercial value. -

There are no quarries nor mines within the township nor are there indications of minerals other than coal and gypsum; of the last named there are great quantities in sec. 17 and 18, while the apex of a very thin coal measure of excellent quality runs through secs. 24-34-15-16-17-18-7 and 6 and all north and east of this line is undoubtedly very valuable coal land. and I therefore return them as such. - The southern and western portion of the township is geologically very much disturbed and I believe the coal measures have been mostly destroyed by erosion though in places the Cretaceous rocks still remain at least in part. -

There are no permanent settlers in the township and the improvements previously referred to are used for summer ranching only while during the winter all are deserted

Andrew P. Henderson
U.S. Dept. Surveyor.

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Final Oaths of Deputy Surveyor and his Assistants.

LIST OF NAMES.

A list of the names of the individuals employed by Andrew P. Hansen,

, United States Deputy Surveyor, to assist in running, measuring, and

marking the lines and corners described in the foregoing field notes of the survey of Subdivision of T. 39 S. R. 10 E. Subdivision of T. 39 S. R. 11 W. Subdivision of T. 38 S. R. 11 W. and Subdivision of T. 38 S. R. 11 W. of Salt Lake showing the respective capacities in which they acted: base and meridian

Henry E. Giers, Chairman.

Thomas E. Lyons, Chairman.

Henry E. Giers, Moundman.

, Moundman.

John Gardell, Axman.

, Axman.

John Gardell, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Andrew P. Hansen,

, United States Deputy Surveyor, in surveying all

those parts or portions of the Subdivision of T. 10 S. R. 2 E. Subdivision of

T. 39 S. R. 9 and 10 W. Subdivision of T. 38 S. R. 10 W.

Subdivision of T. 39 S. R. 11 W. and Subdivision of T. 38 S. R. 11 W.

of the Salt Lake base

and Meridian meridian, 11 Yards, which are represented

in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor General for W. C. Palmer.

Henry E. Giers, Chairman.

Thomas E. Lyons, Chairman.

Henry E. Giers, Moundman.

, Moundman.

John Gardell, Axman.

, Axman.

John Gardell, Flagman.

Subscribed and sworn to before me this 26th }

day of June, 1899 }



Sam. Raney
Notary Public

My commission expires August 11th 1901

Final Oath of United States Deputy Surveyor.

I, _____, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from _____, United States Surveyor General for _____, bearing date of the _____ day of _____, 189, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for _____, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of _____

_____ of the _____ base and _____ meridian, in the _____ of _____, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for _____ and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey; and should any fraud be detected, I will suffer the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

United States Deputy Surveyor.

Subscribed by said _____, and sworn to before me this }
____ day of _____, 189 }



APPROVAL.

Office of the United States Surveyor General,

, 189

The foregoing field notes of the survey of _____

executed by _____
under his contract No. _____, dated _____, 189, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

United States Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in _____, has been correctly copied from the original notes on file in this office.

United States Surveyor General.

Final Oaths of Deputy Surveyor and his Assistants.

LIST OF NAMES.

A list of the names of the individuals employed by Andrew C. Johnson, United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of Subdivision lines and roadway of W. Valley T. 39 S. R. 10 W. — Subdivision lines of T. 39 S. R. 11 W. — and Subdivision lines of T. 39 S. R. 11 W. showing the respective capacities in which they acted:

....., Chairman.
....., Chairman.
....., Moundman.
Joseph B. Bryant, Moundman.
Joseph B. Bryant, Axman.
Edward H. Parry, Axman.
Edward H. Parry, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Andrew C. Johnson, United States Deputy Surveyor, in surveying all these parts or portions of the Subdivision lines and roadway of W. Valley T. 39 S. R. 10 W. — Subdivision lines of T. 39 S. R. 11 W. — and Subdivision lines of T. 39 S. R. 11 W. of the Salt Lake base and meridian, State of Utah, which are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor General for Utah.

....., Chairman.
....., Chairman.
....., Moundman.
Joseph B. Bryant, Moundman.
Joseph B. Bryant, Axman.
Edward H. Parry, Axman.
Edward H. Parry, Flagman.

Subscribed and sworn to before me this 16th day of June, 1897.

day of June, 1897

Serial No. 8000000

My Commission Expires
March 20th, 1903

Levi S. Coffey,
Notary Public

Final Oath of United States Deputy Surveyor.

I, Andrew P. Hansen, United States Deputy Surveyor, solemnly swear that, in pursuance of a contract received from Jacob B. Blair, United States Surveyor General for The State of Utah, bearing date of the 1st day of April, 1898, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for The State of Utah, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of The Subdivision Lines of Township 10 S R 2 E - T 39 S R 9 W T 38 S R 10 W T 39 S R 10 W and T 39 S R 11 W and T 38 S R 11 W.

of the Salt Lake ba
and meridian in the State of Utah, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for Utah, and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey; and should any fraud be detected, I will suffer the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

Andrew P. Hansen
United States Deputy Surveyor.

Subscribed by said Andrew P. Hansen, and sworn to before me this
30th day of September, 1898

SEAL

Jacob B. Blair

Surveyor General for Utah

APPROVAL.

Office of the United States Surveyor General,

Salt Lake City, Utah May 5th 1900, 1900

The foregoing field notes of the survey of The Subdivisions of Township 10 S Range 11 West of the Salt Lake Baseline & Meridian Utah

executed by Andrew P. Hansen
under his contract No. 220, dated April 1st, 1898, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Jacob B. Blair
United States Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in _____, has been correctly copied from the original notes on file in this office.

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BOOK A.256

FIELD NOTES

OF THE SURVEY OF THE

Third Standard Parallel South

through

Range No. 14 East

of the Salt Lake Base and Meridian,
in the State of Utah.

AS SURVEYED BY

Frank Anderson & Willey H. Ware, United States Deputy Surveyors
Under their Contract No. 2212, dated September 30, 1898.

Survey commenced July 25th, 1898

Survey completed July 11th, 1898

The Survey Stands high 3^m above 6-00-00 ✓

NAMES AND DUTIES OF ASSISTANTS.

Clifton Draper, Chairman,

Eyrard Hippolyt, Chairman,

Pat Anderson, Moundman,

Geo. N. Hill, Moundman,

Scott Westfall, Axeman,

Harmon Steander, Axeman,

Milo Captain, Flagman

Cyrus Sidwell Chairman

Joseph Sidwell Chairman

BOOK A-256

INDEX DIAGRAM.

Township _____, Range 14 East.

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Meanders Page _____

PRELIMINARY OATHS OF ASSISTANTS.

We, George Tidwell and Joseph Tidwell,
Clifton Draper, and Ezraard Hespelt,

do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the
 chains over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that
 we will report the true distances to all notable objects, and the true lengths of all lines that we assist in
 running, to the best of our skill and ability, and in accordance with instructions given us, in the survey of

the third Standard Parallel South through Range 20th East of the
 Salt Lake Base and Meridian in Clifton, U.S.A. Chairman,
the State of Utah.

Ezraard Hespelt, Chainman.

Subscribed and sworn to before me this fifth
 day of July 1809



Wm. Pat Anderson

Joseph Anderson

Frank Anderson

U.S. Deputy Surveyor

Geo. H. Hill

do solemnly swear that we will well and truly perform the duties of moundmen in the establishment
 of corners, according to the instructions given us, to the best of our skill and ability, in the survey of
the third Standard Parallel South through Range 20th East of
 the Salt Lake Base and Meridian in Pat Anderson, Moundman,
the State of Utah. William Tidwell, Moundman.

Subscribed and sworn to before me this fifth, Geo. H. Hill
 day of July 1809



Wm. Scott Westfall and Harmon Okander

do solemnly swear that we will well and truly perform the duties of oxmen in the establishment of corners
 and other duties according to instructions given us, to the best of our skill and ability, in the survey of
the third Standard Parallel South through Range 20th East of
 the Salt Lake Base and Meridian in Scott Westfall, Oxman,
the State of Utah. Harmon Okander, Oxman.

Subscribed and sworn to before me this fifth,
 day of July 1809



Frank Anderson

U.S. Deputy Surveyor

Milo Cushing do solemnly swear that I will well and truly
 perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the
survey of the third Standard Parallel South through Range 20th East of
 the Salt Lake Base and Meridian in Milo Cushing, Flagman,
the State of Utah.

Subscribed and sworn to before me this fifth,
 day of July 1809



Frank Anderson

U.S. Deputy Surveyor

Third Standard Parallel South through Range 11 E
Chains

Previous to commencing the survey of
the Third Standard Parallel South
I commence at the Standard corner
to T.P. 15 S. R. 13 & 14 E and run East on
intersection line a distance of 6 miles
searching diligently at each 40⁰ & 80
chis. but fail to find any trace of either
 $\frac{1}{4}$ sec or sec. corners and at 6 miles
search carefully for a radius of 20 chains
for the Standard corner to T.P. 15 S. R. 14
4-15 E with out success and do not
believe same were ever set. I therefore
proceed to resurvey said standard
line as follows.

Resurvey commenced July 5-1899, and
executed with a Wadell & Gurley light
mountain transit the horizontal limb
having two double verniers placed opposite
to each other and reading to 1' of arc.

The instrument was examined tested
on the true meridian at Salt Lake City
Utah found correct and was approved
by the Surveyor General for Utah Oct
24 1898.

I began at the standard corner of T.P.
15 S of R. 13 & 14 East which is a sandstone
6x6 x 4 ins above ground firmly set
marked and witnessed as described by
the Surveyor General

July 5-1899 at this Standard Corner
of townships 15 South ranges 13 and 14
east, on latitude $39^{\circ} 28' N$ and
longitude $110^{\circ} 26' W$

I observe Polaris at 4h 14m a.m.
by my watch is 21m 44s fast of
local mean time and mark the
direction thus determined by a tick
driven in a stake 4 chis. to the
north of corner.

Astron time by watch July 5- 16h 14m
Watch fast 21.7

Astron L.M. t of obs. July 5- 15 52.3

Third Standard Parallel South through Range 14 E

Blk 2

	U. C. Polaris July 1 st 18 ^m 39.4	
	Red to July 4	11.8
	U. C. Polaris July 3/9.9 18 27.6	18 27.6
	Horn angle of Polaris at obs.	21 24.7 23 56.1 2 31.4

Time argument

Azimuth of Polaris at obs. $0^{\circ} 39.5^{\circ}$ E
July 5th at 6:30 am I lay off the
azimuth of Polaris $0^{\circ} 39.5^{\circ}$ to the west
and mark the true meridian thus
determined by driving a tack in a
stake. The magnetic bearing of said
true meridian is 716° W which
induced by the table on page 100 of the
manual gives the mean magnetic
declination $15^{\circ} 56' E$

From this Standard corner of townships
15 S. Range 13 and 14 East. I turn
off from the true meridian an angle
of 90° to the East and run East on
Tangent S of Sec. 31 through scattering
cedars and pines

0.73 Wash drains Westerly

Difference between measurements of 40.00
chs. by two sets of chainmen is 6 chs.
position of middle point
By 1st set 40.03 chs.

40.00 By 2nd set 39.97 chs. the mean of which is
 $N 0.4^{\circ} E$ from the tangent. Set a
sandstone 18 x 11 x 7 lbs 12 ins in the
ground for standard $\frac{1}{4}$ sec. cor. marked
P.S. c $\frac{1}{4}$ on N face. and raised a mound
of stone 2 ft. 4 ins $\frac{1}{2}$ ft. high N of corner
Pits impracticable, no trace of old corner

51.35 Dry Wash drains N.W.

76.45 Wash drains south-westerly
Difference between measurements of
80.00 chs. by two sets of chainmen is
8 chs., position of middle point
By 1st set 80.04 chs.

By 2nd set 79.96 chs. the mean of
which is

Third Standard Parallel South through Range 14
ch.s.

80.00	<p>N 0.34° ff. from the tangent Set up sandstone 26 x 14 x 12 ins. 31 ins in the ground for standard cor of sec. 31 and 32, marked S.C. on N. with 3 grooves on E and 1 groove on W faces and raised a mound of stone 2 ft base $\frac{1}{2}$ ft. high N of corner. Bits impracticable No trace of old corner. Land mountainous. Soil sandy and rocky 3 $\frac{1}{2}$ ins. Spruce scattering cedar and pines Mountainous land 80.00 ch.s.</p>
	July 5 th 1899

	<p>S 89° 59' E on tangent S of Sec. 32. Ascend steep mountain Cliffs. 55 ft. high bear N and S. Continue ascend over very rough cliffs 100 ft. high</p>
13.45	<p>Cliff 38 ft. high, spur from ridge bears N and S.</p>
38.00	<p>Drops down vertically from cliff 65 ft. Difference between measurements of 40.00 ch.s. by two sets of chainmen 28 lbs. By 1st set 39.96 ch.s.) By 2nd set 40.04 ch.s. the mean of which is</p>
40.00	<p>N 1.23 ft. from tangent Set up sand stone 18 x 12 x 6 ins 10 ins in the ground for the standard $\frac{1}{2}$ sec cor marked S.C. $\frac{1}{2}$ on N face, and raised a mound of stone 2 ft. base $\frac{1}{2}$ ft high N of corner. From which 16 cedar trees 10 ins in diam bears. N 49° 30' W 53 lbs dist. marked S. C. 1/4 832 B.C.</p>
	<p>No other trees within limits No trace of old corner. Difference between measurements by two sets of chainmen is 18 lbs. position of middle point,</p>

Third Standard Parallel South through Range
Blks.

	<p>By 1st set 80.09 chs. By 2nd set 79.91 chs. the mean of which is 79.220 ft. from the tangent Strata sandstone $15 \times 8 \times 4$ ins 10 ins in the ground for Standard corner of sec. 32 and 33 marked S.C. on N. with 4 grooves on E and 2 grooves on W faces. sand raised a mound of stone 2 ft. base $\frac{1}{2}$ ft high N of corner from which A. Spine tree 8 ins in diam bears N $3^{\circ} E$ 38 lks dist. marked $T 15 S. R 14 E S 33 T 3 E$ No other trees within limits No trace of old corner Land mountainous Soil stony $4\frac{1}{2}$ rate Timber scattering pines and cedars. Mountainous land 80.05 chs. July 6 1899. </p>
11.24	<p>S $89^{\circ} 58' E$ on tangent S of sec. 33 Over rough mountainous ground Top of ridge dividing Castle Valley from Horse Canyon bears N and S. Elevation about 7000 ft above sea level. Descend over mountainous ground sloping easterly into Horse Canyon Enter dense pines and cedars bearing north and south Difference between measurements by two sets of chainmen is 10 lks position of middle point in $1134 \frac{1}{2}$ set 40.05 chgs.</p>
12.00	<p>By 2nd set 39.95 chgs. the mean of which is 73.43 ft. from the tangent. Strata sandstone $80 \times 8 \times 6$ ins 22 ins in the ground for Standard $\frac{1}{4}$ sec cor marked S.C. upon N. face and raised to a mound of above 2 ft base $\frac{1}{2}$ ft high N of corner from which</p>

40.00	<p>By 1st set 40.05 chgs. By 2nd set 39.95 chgs. the mean of which is 73.43 ft. from the tangent. Strata sandstone $80 \times 8 \times 6$ ins 22 ins in the ground for Standard $\frac{1}{4}$ sec cor marked S.C. upon N. face and raised to a mound of above 2 ft base $\frac{1}{2}$ ft high N of corner from which</p>
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Standard Parallel South through Range 14 E

- As pine tree trees in cedar brars
 N 17° W 44.62s dist. marked
 S. S. 1. S. 33 B. S.
- No other trees within limits
 No trace of old corner
- 63.70 Over cliff 25 ft. high brars north and south
 Center of dry creek bed of Horse Canyon
 15 ft. wide, drains southerly.
- 75.00 Trail to Ranger Creek brars. 21 & S.
 Ascend over small cliffs, scattering
 pines and cedars.
 Difference between measurements of
 80.00 chs. by two sets of chainmen is 22 chs.
 By 1st set 80.11 chs.
- By 2nd set 74.84 chs. the mean of which is
 814.94 ft. from tangent
- Stra sandstone 27 x 12 x 6 ins 20 ins in
 the ground for standard corner of sec
 33 land 34th marked. S. C. on N. with 3
 grooves on E and 3 grooves on W faces
 Land raised a medium of stone 2 ft
 base 1/2 ft. high N of corner from which
 A. adiastole 18 ins in cedar brars
 N 48° 30' E 23 1/2 chs. dist. marked
 T 15 S R 14 E S 34 B. S.
- No other trees within limits
 No trace of old corner
- Land mountainous and cliffs
 Soil rocky & bare
 Timber Cedars and Pines.
 Mountainous land 80.00 chs.
- July 7th 1899

- S 89° 34' E on tangent of sec 34
 Ascend over mountainous ground
 through scattering pines and cedars.
 Land through scattering pines and cedars.
 Facing N and S.
 Difference between measurements of
 40.00 chs. by two sets of chainmen
 is 8 links, position of middle point

Third Standard Parallel South through Range

6th

	By 1 st set 40 chs.
40.00	By 2 nd set 39.96 chs. the mean of which is 76.73 ft from the tangent. Set a sandstone 18x14x12 ins 12 ins in the ground for standard and $\frac{1}{4}$ acre cor. marked S. C. $\frac{1}{4}$ on N face and raise a mound of stone 2 ft base and $\frac{1}{2}$ ft high N of corner. No trace of old corner.
48.20	Top of spur ridge bears N.E. and S.W.
48.30	Descend over large boulders Enter scattering pines and cedars bearing N.E. and S.W.
59.40	Draw draws S.
60.00	Leave scattering pines and cedars bearing N. Ascend over a series of cliffs Difference between measurements of 80 chs. by two sets of chainmen is 24 chs. Position of middle point. By 1 st set 80.12 chs.
- 80.00	By 2 nd set 79.88 chs. the mean of which is 78.79 ft from the tangent. Set a sandstone 10x10x6 ins 11 ins in the ground for standard corner of sec. 34 and 35 marked S.C. on N with 3 grooves on E and 4 grooves on W faces and raise a mound of stone 2 ft base $\frac{1}{2}$ ft high N of corner from which A pine tree 12 ins in diam. bears N 30° E 62 lbs don. marked T 15 S R 14 E S 35 P.T. No other trees with int. limits No trace of old corner. Land mountainous and very craggy Soil rocky. 4 th Rate. Timber scattering cedars and pines. Mountainous land 80.00 chs.

July 8th 1849

S 85° 36' E. on tangent S of the 35

Standard Parallel South through Range 14 East.

	Ascend over very rough and precipitous cliffs.
8.10	Slopes of spur ridge 20 lbs wide bears N. and S. 100 ft high.
36.57	Ridge between two forks of Horn Canyon below N 45° W and S 45° E
36.70	Descend land slopes to N.
37.00	Enter pines and cedars bearing N.W. & S.E.
	Difference between measurements of 44.5.00 chs. by first sets of chainmen is 1/2 lbs position of middle point By 2nd set 44.56 chs.
40.45	By 2nd set 39.44 chs. the mean of which is N 11.2 ft from the tangent Set a sandstone 12 x 6 x 6 ins 8 ins in the ground for standard 1/4 sec cor marked S.C. 1/4 on N. face and raise a mound of stone 2 ft high 1/2 ft high N of corner. from which A pine tree 7 ins in diam bears N 54° 45' E 33 lbs dist. marked S.C. 1/4 S 35° 13.0
	No other trees within limits
	No trace of old corner.
60.28	Draw, draw N.
	Juniper becomes scattering
	Difference between measurements of 80.00 chs. by two sets of chainmen 1/2 22 lbs position of middle point By 1st set 80.11 chs
80.80	By 2nd set 79.89 chs. the mean of which is Ch 3.73 ft from the tangent Set a sandstone 16 x 12 x 6 ins 12 ins in the ground. for standard cor of sec. 35 and 36 marked S.C. on N with grove on E and groves on W faces and raise a mound of stone 2 ft base 1/2 ft high N of corner. from which A pine 14 ins in diam bears N 30° E 63 lbs dist marked T.10 S.R. 14 E S 36 T.0

Third Standard Parallel South through Range 14
Colo.

	No other traps within limits. No trace of old corner. Land mountainous Soil rocky 4 th rate Timber pine and cedar. Mountainous land 80.00 chs. July 10 th 1899.
12.56	S 89°56' E on tangent S of sec 36 Ascend over ground sloping N and through scattering timber.
12.57	Divide between Horse Cañon and Range Creek Cañon bears N 10° W and S 10° E Elevation about 8500 ft above sea level.
12.81	Descend over mountain slope covered with short underbrush.
17.81	Enter scattering pine and quaking asp. timber bearing N and S.
38.00	Draw drains N. Enter dense quaking asp timber bearing N and S. Difference between measurements of 40.00 chs. by two sets of chainmen is 10 ft position of middle point By 1 st set 40.05 chs. By 2 nd set 39.95 chs. the mean of which is 39.96 ft. from the tangent. Set up sandstone 16x12x4 ins 11 ins in the ground for the standard 1/4 sec cor. marked S.C. 1/4 on N face and raised a pyramid of stone 2 ft base 1/2 ft high N of corner from which a pine tree 6 ins in diam bears N 47° 30' E 3 lbs. dist. marked S.C. 1/4 S. 36 B. S.
	No other traps within limits. No trace of old corner.
40.25	Boulder 15x8x8 ft on line
77.34	Draws drains N 4° E Difference between measurements of

Standard Parallel South through Range 14 East.

80.00 chs. by two sets of chainmen is
22 lbs. position of middle point
By 1st set .80.11 chs.

- 80.00
By 2nd set 79.89 chs. the mean of which is
719.77 ft. from the tangent
Set a sand stone 24x62x8 ins. 18 ins in
the ground for the Standard corner of
Twp. 15 S. R. 14 and 15 E marked S.E.
S.E. for N. 15 E in E 14 E on W faces.
with 6 grooves on N. E & W faces. and
raised a round of stone 2 ft base.
1/2 ft high N of corner. Pile inspec-
tible from which

A picket line 10 ins in diam. bears.
N 32° 28' W 44 lbs. dist. marked
S 15 S R 14 E S 36 73 F.

No other pegs within 6 rods
No trace of old corner.

Land no mountainous

Soil sandy and rocky 3rd or 4th rate
Timber pines and quaking asps
Dense timber 38 chs.

Dense underbrush 30 chs.

Mountainous land 80.00 chs.

July 11th 1899

July 11 1899

I set up the instruments at the east
end of Hwy 3 cor. and with the surveyor
plate at 0. I sighted to a flag placed
on pine 18 chs. to the west and between
the established corner of sec 34 & 35
and this corner.

At 8h 30 m P.M. I unclamped the surveyor
plate observe Polaris and marked the
direction thus determined by a tack
driven in a stake 4 rods north of cor.

The reading of the vernier at the instant
of observation is 90° 50'

Antony time by watch July 11 8h 30m
Watch fast 21.3

Third Standard Parallel South through Range 17 East.

Astrom. l. m. t. of obs. July 11	8h 08.73
Alt. C. Polaris July 12 ¹⁸⁹⁹	18 37.4
Red A July 10	<u>35.3</u>
C. C. Polaris July 10-1899	18 04.1
Hour angle of Polaris at obs.	<u>18 04.1</u>
Subtract from	<u>14 - 04.6</u>
Time apparent.	<u>23 56.1</u>
9 51.3	
Azimuth of polaris at obs.	0° 50.2 E
Subtract angle observed	<u>90° 30'</u>
	90° 00'

From which observation I draw the
standard parallel satisfactorily established

General Description.

For General Description see notes of
Sub-division of this Township

Frank Anderson

Wiley H. Ware

No officer authorized to administer oaths -
other than myself being available without
great inconvenience, delay and expense
I administer the required preliminary
and final oaths.

Frank Anderson.

U. S. Dep. Surveyor.

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FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Frank Anderson and Wiley A. Hau, United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey or third standard parallel south through Range No. 14 East of the 1st P.M. Meridian, showing the respective capacities in which they acted:

Clifton Draper and Cyrus Tidwell, Chainman.
Eugene Hippolyte and Clifton Draper, Chainman.
Pat Anderson, Moundman.
Geo. N. Hill, Moundman.
Scott Westfall, Axman.
Harmon Skander, Axman.
Milo Cuyler, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Frank Anderson and Wiley A. Hau, United States Deputy Surveyor, in surveying all those parts or portions of the third standard parallel south through Range No. 14 East,

base and meridian, in the State of Utah, which are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor General for Utah. Cyrus Tidwell,
Clifton Draper, Chainman.
Eugene Hippolyte, Chainman.
Pat Anderson, Moundman.
Geo. N. Hill, Moundman.
Scott Westfall, Axman.
Harmon Skander, Axman.
Milo Cuyler, Flagman.
Joseph Tidwell, Chairman.

Subscribed and sworn to before me this 14

day of September, 1899



Frank Anderson
U.S. Deputy Surveyor

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

We, Frank Anderson and Wilsey H. Ware, United States Deputy Surveyors do solemnly swear that, in pursuance of a contract received from Jacob B. Blair, United States Surveyor General for The District of Utah, bearing date of the 30th day of September, 1898, we have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for The District of Utah, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of The Third Standard Parallel South through Range 14 East.

Base and meridian, in the State of Utah, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for The District of Utah, and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey; and should any fraud be detected, I will suffer the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

Wilsey H. Ware Frank Anderson

United States Deputy Surveyor.

Subscribed by said Frank Anderson, and sworn to before me
this 18th day of December, 1898.



Jacob T. B. Blair
U.S. Surveyor General for Utah

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Utah City, Utah May 5th 1900

The foregoing field notes of the survey of The Third Standard Parallel South Range 14 East of the Salt Lake Base & Meridian, Utah,

executed by Frank Anderson & Wilsey H. Ware, dated September 27, 1898, having been under contract No. 290, dated September 27, 1898, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Jacob T. B. Blair
United States Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in _____, has been correctly copied from the original notes on file in this office.

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FIELD NOTES

OF THE SURVEY OF THE

East and North Boundaries

of

Township No. 15 South, Range No. 14 East.

of the Salt Lake Base and Meridian,
in the state of Utah

AS SURVEYED BY

Frank Anderson and Wilday H. Ware United States Deputy Surveyors
 Under Contract No. 272 dated September 30th 1898

Survey commenced	July 12 th	1899
Survey completed	July 22 nd	1899

6 miles E. of Taylorville 6 miles S.
 2° 1' N. Dist. Regt. 5-79-71 4

NAMES AND DUTIES OF ASSISTANTS.

Clifton Draper, Chairman

Eyrard Hippolyt Chairman

Pat Anderson Moundman

Geo. N. Hill Moundman

Scott Westfall, Axeman

Harmon Okander Axeman

Milo Captain Flagman

BOOK A-256

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Township 15 South, Range 14 East.

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Meanders Page —

PRELIMINARY OATHS OF ASSISTANTS.

WE, Clifton Draper

and

Eugraud Hippolyt

do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of

the East and North Boundaries of Township No. 15 South Range No. 14 East
of the Salt Lake Base and Meridian in the State of Utah

Clifton Draper

, Chainman

Eugraud Hippolyt

, Chainman

Subscribed and sworn to before me this

fifth
July, 1899

Frank Anderson

U.S. Deputy Surveyor

day of



WE,

Pat Anderson

and

Geo. N. Hill

do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of

the East and North Boundaries of Township No. 15 South Range No. 14 East
of the Salt Lake Base and Meridian in the State of Utah

Pat Anderson

, Moundman

William J. Dugwell

, Moundman

Subscribed and sworn to before me this

fifth
July, 1899

Frank Anderson

U.S. Deputy Surveyor

day of



WE,

Scott Westfall

and

Harmon Chander

do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey of

the East and North Boundaries of Township No. 15 South Range No. 14 East
of the Salt Lake Base and Meridian in the State of Utah

Scott Westfall

, Axman

Harmon Chander

, Axman

Subscribed and sworn to before me this

fifth
July, 1899

Frank Anderson

U.S. Deputy Surveyor

day of



I,

Milo Culpin

do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of the East and North Boundaries of Township No. 15 South Range No. 14 East of the Salt Lake Base and Meridian in the State of Utah

Milo Culpin

, Flagman

Subscribed and sworn to before me this

fifth
July, 1899

Frank Anderson

U.S. Deputy Surveyor

day of



East Boundary of T. 15 S R. 1 E

Previous to commencing the survey of the North and East boundaries of this township I traced same searching diligently at proper distances from old 1/4 sec. and six corners, also for the Cor to. Pps. 14 & 15 S R. 14 & 15 E but without success and do not think same were ever established therefore I proceed to survey same as follows.

Survey commenced July 12-1899 and executed with a W. & L. E. Gurley Light Mountain transit the horizontal limb having two double verniers placed opposite to each other and reading to 1° of arc.

The instrument was examined tested on the true meridian at Salt Lake City Utah found correct and was approved by the Surveyor General for Utah Oct 24-1898.

I began at the standard corner of Pps. 15 S R. 14 and 15. E., which is a sandstone set by me July 11-1899 and described in the notes of my Third standard parallel south through range 14 E of said date of July 11-1899 I set instrument over said standard townships corner and sight to stake driven in stake, which marked the direction of an observation on Polaris July 11 at 8^h 30 m P.M. From this direction I turn to the West $0^{\circ}50'$ and run north between secs 31 and 36

Variation $16^{\circ}05' E$

Through scattering pines and quaking asps
Enter dense undergrowth

Draw-drain $435^{\circ} E$

Dry creek bed of a branch of Range creek
cañon 3 lbs wide drain $880^{\circ} E$

Trail from Piney Cañon to Range creek
cañon which follows creek bed,

Dense underbrush ends.

3.00

4.24

9.10

East Boundary of T 15 S. R 14 E

6 hrs.

		Ascend and enter scattering pines cedars and mahogany bearing E and W. No trace of old corner.
10.00		
40.00		Set a sand stone 18x12x5 ins 12 ins in the ground for $\frac{1}{4}$ sec cor marked $\frac{1}{4}$ on N face and raised a mound of stone 2 ft base $\frac{1}{2}$ ft high W of corner. Pots impracticable from which A cedar tree 6 ins in diam. bears. S 84° 30' E 30 lbs disk marked $\frac{1}{4}$ S 31 D.T. No other trees within limits
42.05		Ridge dividing two branches of Range Creek Cañon bears E & W 250 ft high.
42.37		Descend rapidly Enter dense pines quaking asps and underbrush bearing E & W.
60.00		Underbrush becomes dense and timber scattering.
76.56		Dry creek bed 5-6 ft wide of branch of Range Creek Cañon drains E 200 ft below ridge Leave dense underbrush bearing E and W
78.00		Ascend and Enter scattering mahogany cedars. and pines bearing E & W No trace of old corner.
-80.00		Set a sand stone 24x18x12 ins 18 ins in the ground for cor. of nos 25-30 31 and 36 and marked 3 notches on N and 1 notch on S edges and raised a mound of stone 2 ft base $\frac{1}{2}$ ft high W of corner Pots impracticable from which A mahogany tree 9 ins in diameter bears S 38° 40' W 45 lbs disk marked T 15 S R 14 E S 36 D.T. No other trees within limits Land mountainous Soil sandy loam and rocky soil and granite Timber pines cedars aspens and Mountain Mahogany. Dense pines 4-5 ins Mountain out land 80,000 lbs
		July 12 th 1899

East Boundary S. 15 S R. 14 E.

- North between secs 25 and 30
 Ascend over rocky ground and through scattering pines, cedars, and mahogany.
 10.38 Flat grassy ridge bears S & SW and N 83° E 82 ft. high
 11.00 Descend
 Enter dense underbrush bearing E & W
 15.38 Enter dense pines bearing E & W
 Underbrush becomes scattered
 18.80 Leave dense pines timber bearing E & W
 Enter dense quaking asp. timber bearing E & W
 20.76 Leave dense quaking asp. timber bearing E & W
 Dry creek bed of branch of Range Creek
 21.50 5 lks wide drains S 70° E 70 ft. deep.
 Ascend
 Enter scattering pines, cedars and mahogany
 23.63 Cliffs 20 ft. high general course E & W
 30.65 Ridge bears S 80° E and N 85° W 160 ft. high.
 Leave scattering timber
 34.44 Descend enter scattering timber and underbrush
 40.00 No trace of old corner.
 Silty sandstone 24 x 24 x 6 ins 18 ins
 in the ground for $\frac{1}{4}$ sic 200. marked
 $\frac{1}{4}$ on west face and raised a mound
 of stone 2 ft. base $1\frac{1}{2}$ ft. high W of corner
 Hills impracticable from which
 A pine tree 6 ins in diam. bears
 N 27° 30' E 73 lks. marked $\frac{1}{4}$ S 30 B.T.
 No other trees with in 6 miles
 40.60 End scattering timber and underbrush
 Dry creek bed 5 lks wide of a branch of.
 Range Creek drains S 75° E - 200 ft
 sdip.
 47.60 Ascend
 Enter scattering pines, cedars and mahogany
 timber.
 52.34 Cliffs 30 ft. high bear. E and W
 54.75 S.E. end of prominent point of cliffs
 40 ft. high bear N 30° W
 65.25 Drop down abruptly from esp. of cliff 40 ft.

East Boundary of T15 S. R14 E

- 80.00	No trace of old corner Set a sandstone 16x16x6 ins 12 ins in the ground for the cor of secs. 19-24-30- and 30 and marked 4 notches on N and 2 notches on S edges and raised a mound of stone 2 ft high 15 ft high W of corner. Pits impracticable from which A pine tree 14 ins in diam. bears $N 67^{\circ} 30' E$ 36 chs dist marked T 15 S R 14 E S 19 B, T, A cedar tree 14 ins in diam. bears $S 50^{\circ} 30' W$ 32 chs dist marked T 15 S R 14 E S 25 B, T, No other trees within limits. Land mountainous Soil sandy loam and stony - 25 and 45 feet Timber pine, cedar, quaking asp, mountain mahogany, Dense underbrush 11 chs. Mountainous land 80.00 chs.
	July 10-1899.

8.85	North between secs. 19 and 24 Ascend over rocky mountain side Through scattering pines, cedars and mahogany Top of ridge bears $N 75^{\circ} 30' E$ and $S 75^{\circ} 30' W$ 350 ft high
9. 33	Descend
24. 83	Dense pine timber begins bearing N E and S W
32.30	Leave dense pine and enter dense quaking asps.
33.81	Leave dense quaking asps. Enter heavy underbrush
37.03	Leave heavy underbrush Creek 2 lds wide runs about 29 ahs. pure water per minute, in channel 6 lds wide; and about 300 ft deep flows $N 35^{\circ} E$
40.00	No trace of old corner Set a sandstone 40x24x12 ins 30 ins

East Boundary T. 5 S. R. 14 E

Obs.

	in the ground for $\frac{1}{4}$ sec cor. marked $\frac{1}{4}$ on surface and raised a mound of stone 2 ft base $\frac{1}{2}$ ft high w of corner Pits impracticable. From which which ascend through scattering pines and mahogany over rough mountain side.
44.77	Cliffs 25 ft high bear $79^{\circ} 45' E$ and $8^{\circ} 45' W$
45.60	Pelley bears $79^{\circ} 45' E$ and $8^{\circ} 45' W$
45.85	8 sec und.
74.36	Enter dense pines timber bearing E & W Leave dense pines bearing E & W Dry creek bed of branch of Range Creek stones E 400 ft deep.
75.88	Ascend enter through scattering mahogany
79.10	Cliffs 10 ft high bear E & W
80.00	No trace of old corner Lift a sandstone 16x14x8 ins 11 ins in the ground, for cor of secs. 13-18-19 & 24 and marked with 3 notches on S and 3 notches on N edges. and raised a mound of stone 2 ft base $\frac{1}{2}$ ft high w of corner Pits impracticable. from which
	A. cedar tree 12 ins in diam bears $79^{\circ} 48' 30' E$ 41. obs dist marked T 13-5 R 15-E S 18-B T.
	A cedar tree 6 ins in diam bears. $79^{\circ} 48' 30' W$ 46 obs dist marked T 13-S R 14-E S 13-B T.
	No other trees within limits
	Land mountainous Soil, rocky and sandy loam 4 th . 3 rd and 2 nd late. Timber, pines, cedars, mahogany and Quaking asps., and Ceder brush
	Mountainous land 80.00 chs

July 14, 1899

With following sec 13 and 18
Ascend through scattering cedars
and mahogany.

East Boundary S. 1/4 E

- 10.48 Over cliff 20 ft high bears E and W
 12.15 Top of ridge bears 370° W and 770° E
 420 ft high
- 12.47 Descend
 Enter dense pines bearing E & W
 20.40 Center of dry creek bed 3 lks wide
 drains E into Range creek,
 Depth of gulch 375 ft.
 Leave dense timber bearing E and W
 Ascend.
- 27.00 Enter scattering mahogany and pines
 36.06 Over cliff 20 ft high ground very
 irregular
 40.00 No trace of old corner.
 Set a sandstone 20 x 16 x 5 ins 15 ins in
 the ground for $\frac{1}{4}$ sec cor. and marked
 $\frac{1}{4}$ in W face and raise a mound
 of stone 3 ft base $\frac{1}{2}$ ft high W of cor.
 Both impracticable from which
 A cedar 8 ins diam bears S $55^{\circ} 30' W$.
 23 lks dist marked $\frac{1}{4} S 13^{\circ} 31' E$
 No other tree with in limits
- 36.32 Ridge bears E & W 400 ft high
 56.60 Descend
 Enter dense pines bearing E & W
 79.67 Leave dense pines bearing E & W
 Center of creek bed in ravine 6 lfs
 wide 15 lks deep. cut out in the rock
 small flow of water in bottom from
 surface above - drains S $60^{\circ} E$
 Depth of ravine 350 ft.
- 80.00 No trace of old corner.
 Set a sandstone 20 x 14 x 6 ins 15 ins
 in the ground for 100 ft sec 7-12-13
 and 10. and marked 3 notches on N
 and 4 notches on edges and raise
 a pyramid of stone 2 ft base and $\frac{1}{2}$ ft
 high W of corner.
 Both impracticable from which
 A pine tree 6 ins in diam bears.
 $S 14^{\circ} 30' E$ 29 lks dist. marked
 $T 15 S R 15 E S 18 B T.$

East Boundary of T15 S R14 E

Aug 15 Quaking asp tree 8 ins. in diam
 bears S $85^{\circ}30'W$ 25 lvs dist marked
 T15 S R14 E S13 B9.
 No structures within limits
 Land mountainous
 Soil rocky and sandy loam
 $4\frac{1}{2}$ and $2\frac{1}{2}$ rate
 Timber pine, cedars, mahogany
 and Quaking asp.
 Mountain timber land 80,000 ac.
 July 15th, 1899.

- | | |
|-------|---|
| | With between secs 7 and 12
Ascend over bottom of gulch
Enter scattering timber of mahogany
pine and cedar |
| 3,45 | Over cliff 25 ft high bear E and W |
| 8,50 | Ridge bears N $42^{\circ}W$ and S $42^{\circ}E$ |
| 9,04 | 200 ft high. |
| 23,77 | Descend enter dense pine bearing E + W
Dry creek bed 6 lvs wide in gulch, a
branch of Range Creek which drains
S $29^{\circ}30'E$ 145 ft deep. |
| 28,27 | Leave heavy timber bearing E + W
Ascend up gulch bottom and
through scattering quaking asp.
Enter scattering pines cedars and
mahogany and ascend over rough
cliff mountain side |
| 40,00 | No trace of old corner. |
| | Set a 2 and stone 20x2x8 ins 15 ins
in the ground for $\frac{1}{4}$ sec cor. marked
$\frac{1}{4}$ m. face, and raise a mound of
stone 2 ft base $1\frac{1}{2}$ ft high w of corner
Pits impracticable |
| | No trees within limits |
| 59,27 | Ridge bears N $19^{\circ}30'W$ and S $19^{\circ}30'E$
530 ft high. |
| 59,60 | Descend enter dense pines and
underbrush bearing S E and NW |
| 80,00 | No trace of old corner. |

East Boundary of T₁₅S R₁₄E

Stony sandstone 24x15x8 ins. 18 ins
into ground for the cor & sec. 1-6
-7-12 marked 1 notch on N
and 3 notches on S edges and raised
a mound of stone 2 ft base 1/2 ft
high W of corner.

Pits impracticable from which

A pine tree 12 ins in diam bears
N 75° E 32 lbs dist marked

T₁₅S R₁₅E S₆B.T.

A pine tree 12 ins in diam bears
S 25° W 17 lbs dist marked

T₁₅S R₁₄E S₁₂B.T.

A pine tree 2 ins in diam bears
N $15^{\circ}10'W$ 30 lbs dist marked

T₁₅S R₁₄E S₁B.T.

No other tree within limit.

Land mountainous.

Soil stony and sandy loam

4th and 2nd rate.

Timber pines cedars quaking asp
and mountain mahogany.

Mountainous land - 8000 ft elev.

July 16th 1899

North between secs 1 and 6

Ascend through dense timber

2,47 Bottom of draw drains N 77° E

Leave dense pines bearing N.E. and S.W.

Enter scattering timber,

Ascend,

Ridge bears N 86° C 100 ft high.

Descend into dense timber pines

and quaking asps bearing E and W.

Draw 5 lbs. wide drains N $76^{\circ}30'E$

Leave dense timber bearing E and W

Enter scattering pines cedars and

mahogany.

Ascend over rough cliff mountain side

Ridge, bears S $88^{\circ}20'E$ 100 ft high

Descend enter dense pine timber.

11,48

11,60

205,19

35,02

35,20

East Boundary T 15 S, R 14 E

	bearing S and W No trace of old corner
40.00	Set a sandstone 16" x 12 x 6 ins 12 ins in the ground for cor & of Pps. 14 and 15 S, R. 14 and 15 E marked $\frac{1}{4}$ on W face and raised a mound of stone 2 ft base and $1\frac{1}{2}$ ft high S of corner. This impracticable from which a pine tree 6 ins in diam bears N $26^{\circ} W$ 9 lbs dist marked $\frac{1}{4}$ S, 13 T No other trees within limits
44.23	Leave drain S $78^{\circ} E$ Leave dense timber bearing S & W Enter scattering pine cedar and mahogany timber Ascend
50.5-6	Ridge bears S $82^{\circ} E$ and N $82^{\circ} W$ 100 ft high.
50.6-7	Descend, enter dense underbrush and enter scattering pine and quaking asp.
62.07	Rough creek 3 lbs wide 6 lbs deep spur water flows S $31^{\circ} E$ Canyon 600 ft deep. Leave dense underbrush Ascend
73.83	Small ridge bears N $58^{\circ} E$ and S $58^{\circ} W$ 80 ft high. Descend.
76.98	Bottom dry gulch 3 lbs wide drains S $52^{\circ} W$ 9 lbs deep.
80.00	No trace of old corner. Set a sandstone 30 x 16 x 8 ins 21 ins in ground for cor & of Pps. 14 and 15 S, R. 14 and 15 E marked 14 S on N E. 15 E on S E. - 15 S. on S W and 14 E on N W faces and 6 moleras on each edge. and raise a mound of stone 2 ft base $1\frac{1}{2}$ ft high S of corner This impracticable from which a pine tree, 6 ins in diam bears

East Boundary S. 15 S. R. 14 E.
Obs.

S^o 15° 30' W 53 lbs. disk marked
T 15 S. R. 14 E S 1 13 T.
A pine tree 10 in. diam. bears N 54°
30' E 36 lbs. disk marked
T 14 S. R. 15 E S 1 13 T.
No other tree within limit.
Land mountainous.
Soil stony and sandy loam 14 ft. and
2 m. ^{ft} rate.
Timber Pines cedars mahogany
and quaking asp.
Mountain of land 80.01 elev.

July 17/99.

North Boundary T15S R14E

July 18th 1899

At the corner of Tps 14 & 15 S R.s 14 & 15 E
at 4 h and 14.7 m. a.m. Astron time
I observed Polaris and marked the
direction thus determined by a tack
driven in a stake 32 hs to the north
of corner

Astron l.m.t. of obs. July 18th 1899 16th 14.7

U.C. Polaris July 15 17th 44.6

Red. to July 17 7.8
 17-36.8

17-36.8

22-37.9

23 36.1

1 - 18.2

Time argument

Gnimuth of Polaris at obs. $0^{\circ}33' E$

At 6 h 30 m A.M I turn west from
tack in stake $0^{\circ}33'$ and reverse and
find flag pole placed on line 68.52
deg. to the south on the vertical wire
of transit and deer the east boundary
of T15S R14E satisfactorily established

North Boundary of T15S R14E

Previous outracement of this line
shows the course of same to be
 $N 89^{\circ}48' W$ between the corner of Tps
14 & 15 S. R.s 14 & 15 E as first reestablished
and the old established corner of

Tp 14 15 S R.s 13 & 14 E therefore from
the said township corner mentioned
above I sight again to tack in stake
which marked the direction of the
observation of Polaris observed this
day at 4h and 14.7 m am. I. M. T.
and turn west $90^{\circ}21' W$ and
run $N 89^{\circ}48' W$ fitfully across and
36 Va $15^{\circ}59' E$.

Descend through scattering timber
Cruck bottom of range creek canon
7 lbs wide 7 ft deep with pure water
Horo dip. flows South. depth
of canon 600 ft.

7.12

North Boundary T. 15 S R. 14 E.

9.12	Ascend through pines and quaking- grasses
14.65	Spring pure water 3 ft. south runs 2 gts per minute drains E
40.00	No trace of old corner Set of sandstone 20 x 20 x 8 ins 15 ins in the ground for $\frac{1}{4}$ sec cor and marked $\frac{1}{4}$ off N face and raised a mound of stone 2 ft base $\frac{1}{2}$ ft high N of corner Pits impracticable No trees within limits
48.81	Ridge of hill bears N 20° E and S 20° W 400 ft high
49.00	Descend.
67.25	Dry gulch 7 lbs wide drains N 25° E Pines become scattered quaking grass etc.
74.72	Ridge of ridge bears N E and S W
- 80.00	No trace of old corner. Set of sandstone 24 x 2 x 6 ins 18 ins in the ground for the cor & secs 1-2-3-5 + 36 marked with notch on E and 5 notches on W edges, and raised a mound of stone 2 ft base $\frac{1}{2}$ ft high N of corner Pits impracticable from which A quaking grass tree, 6 ins in diam bark S 34° E 10 lbs. dist. marked T 15 S R 14 E S, B.T.
	A pine tree 8 ins in diam bears N 79° 30' W 33 $\frac{1}{2}$ lbs. dist. marked T 14 S R 14 E S 3 5 B.T.
	No other trees within limits Land mountainous Soil stony and sandy loam 4 ft and 5 ft rate
	Timber pines and quaking grass Mountainous land 8000 ft.

July 18th 1899

N 89° 48' W between sec 2-35

Boundary T 15 S. R 14 E

	Ascend through dense quaking asp. Draw drains N 22° E
7,18 24,62	Palms Mesa bearing N & S. Elevation about 9000 ft.
40,00	No trace of old corner. Set a sand stone 14 x 12 x 4 ins 10 ins in the ground for 1/4 sec 20. and marked 1/4 on N face and raised a mound of stone 2 ft base 1/2 ft high north of sec.
	Pits impracticable from which A pine stump 10 ins in diam. 2 1/2 ft high bears North 1/2 E. and marked N 1/2 E 35 BT.
58,65	No other trees within limits End dense timber Descent over steep rugged cliff and through scattered pines and cedars.
80,00	No trace of old corner Set a sand stone 24 x 12 x 6 ins 18 ins in the ground for sec 20 sec 2-3 34 & 35 and marked two notches on E and 4 notches on W edges and raise a mound of stone 2 ft base 1/2 ft high N of corner. Pits impracticable from which A pine tree 20 ins in diam bears 350° 20' E 35 lbs dist marked T 15 S R 14 E S 2 BT.
	A. pine tree 8 ins in diam bears S 44° 00' W 34 1/2 lbs dist marked T 15 S R 14 E S 3 BT.
	No other trees within limits Land mountainous Soil stony and sandy loam 4 in and 2 m. frate Timber dense pines and quaking asp. for 7/8 chs. scattered cedars and pines 9 lbs.
	Mountainous land 80,00 chs July 18-1899

North Boundary T15 S. R14 E
Sec. 3

	<p>$71^{\circ} 89' 48'' W$ between Secs 3 and 34 Discued, through scattering timber and over ledges.</p>
23, 71	<p>Draw draws $8^{\circ} 5' 30'' W$ Ascend</p>
40, 00	<p>No trace of old corner Set a sand stone $24 \times 12 \times 8$ ins 18 ins in the ground for corner and marked $\frac{1}{4}$ on N face and raised a mound of stone 2 ft base $\frac{1}{2}$ ft high N of corner Pits impracticable from which A pine tree 13 ins in diam. bears $71^{\circ} 26' 30'' W$ 24 lbs dist. marked $\frac{1}{4}$ S 34 BT. No other trees within limits</p>
56, 91	<p>A spur cliff from ridge to the north 85 ft high 19 lbs with bears $39^{\circ} 40' E$ and $71^{\circ} 90' 40' W$ Discued</p>
- 89, 00	<p>No trace of old corner Set sand stone $21 \times 15 \times 8$ ins 15 ins in the ground for corner & recs 3-4-33 and 34 marked with 3 notches on W and 3 notches on E edges and raised a mound of stone 2 ft base $\frac{1}{2}$ ft high N of corner Pits impracticable from which A pine tree 12 ins in diam. bears $S 11^{\circ} 40' W$ 17 lbs. dist. marked T 15 S R 14 E S 4 BT. No other trees within limits Land mountainous and ledges Soil sandy and rocky 3rd and 4th rate Timber scattered pines and cedars Mountainous land 8,000 chs.</p>

July 20 1899

$71^{\circ} 89' 48' W$ between sec 4 and 33
Ascend through scattering pines and
cedars, and over small ledges

North Boundary T. 15 S., R. 14 E.

7.00	Spur ridge bears S 15° 20' W and N 15° 20' E
7.12	Descend
40.00	No trace of old corner Set sandstone 30x14x8 ins 22 ins in the ground for 1/2 sec cor marked 1/4 north face and raised ground of stone 2 ft base 1/2 ft high N of corner Plot impracticable from which A pine tree 12 ins in diam bears N 48° E 24 lbs. dist. marked by S 33 BT No other trees within limits
57.35	Bottom of dry creek bed of the south fork of Edwell Cañon 27 lbs wide drawers N 38° 40' W 500 ft deep. Ascend, scattering pines begin
62.28	Descend
67.03	Bottom of dry creek bed of Edwell Cañon 30 lbs wide, drawers S 41° 30' W
67.18	Ascend. 1
80.00	No trace of old corner Set sandstone 17x8x5 ins 12 ins in the ground for sec cor to segs 4-5 32-33 and marked with 4 matches on the E and 2 matches on the wedges and raised a ground of stone 2 ft base 1/2 ft high N of corner Plot impracticable from which A cedar tree 8 ins in diam bears S 29° 30' W 54 1/2 lbs. dist. marked T 15 S. R 14 E S 5 BT No other trees within limits D and around air holes Soil rocky and sandy 4 th and 3 rd rate Climber scattering pines and cedars Mountainous land 80,00 chs.

July 31 1899

N 89° 48' W lithographic nos. 5 and 32
Ascend through scattered pines and
cedars.

North Boundary T. 3 S R. 14 E

Chs.

9.12	Draw drains S
26.75	Spur ridge bears N and S
27.17	Described over ledges and through scattering pines and cedars.
40.00	No track of old corner. Sift sand stone 33 x 10 x 8 inches in the ground. On $\frac{1}{4}$ acre cor marked $\frac{1}{16}$ on N face and raised a mound of stones 2 ft base $\frac{1}{2}$ ft high N of corner. Potts impracticable from which A pine tree 10 ins in diam bears S 61° 15' E 132 lbs. dist. marked $\frac{1}{4}$ S 6° 13' T.
	A pine tree 12 ins in diam bears N 79° 00' E 126.5 lbs. dist. marked $\frac{1}{4}$ S 8° 13' T.
	No other trees with in limit. Mouth of tunnel entrance to coalmine bears S 31° 20' E 2.23 chs.
	S. W. cor of Joseph Tidwell house bears N 34° 55' W 16.30 chs.
	S. W. cor of Joseph Tidwells house bears N 43° 05' W 17.82 chs.
	S. E. cor. of stone house bears N 25° 28' W 21.75 chs.
40.23	Intersection mine track from mouth of tunnel bearing S 52° 30' E and N 52° 30' W
41.54	Wagon road to mine bears N 32 W & S 32 E
42.50	Bottom of dry creek bed. Tidwell canon 18 lbs wide - drains N 34° W arcined, scattered pines.
43.18	Spur from railroad of the R. G. W. Ry. bears N W & S E
53.18	Top of ridge bears N 71° W and S 71° E. 90 ft high
53.79	Described
63.63	Branch of R. G. W. Ry. from grounds to Sunny side bears S W & N E
73.28	Creek 7 lbs wide containing $\frac{1}{2}$ ins. water and running about 5 gals per minute. drains S 42° 20' W and flows as

North Boundary T15 S. R14 E

	Whitmores creek
74.50	Wagon road bears N.E. and S.W. Ascend.
75.20	No trace of old corner.
80.00	Set sandstone 24x14x6 ins 18 ins in the ground for sec cor to secs. 5-6-31 + 32 and marked with 1 notch on W and 5 notches on E edges and raised a mound of stone 2 ft. base 1/2 ft high w. of corner This impracticable from which A pine tree 10 ins. Indian. bears. 360° 70' E 9 lbs dirt marked
	T 15 S R 14 E S 5 T 3 R 7
	No other trees within limits.
	Land mountainous.
	Soil rocky and sandy brown $\frac{1}{2}$ to 2 in. thick.
	Timber Ponderosa pines
	Mountainous land 80.00 clrs
	July 21 st 1899

	789° 48' W between secs 6 and 31
	Circum over rough ledges.
24.86	Top open ledge bears N & S 130 ft high
25.24	Descend over ledges.
38.65	Draw draining S.
40.00	No trace of old corner.
	Set sandstone 16x12x4 ins 10 ins in the ground for sec cor. marked
	$\frac{1}{4}$ ft N face and raised a mound of stone 2 ft base 1/2 ft high N of corner This impracticable
	No trees within limits
55.20	Dry wash drains S.W.
60.07	Draw drains S.W.
79.71	To cor to Townships 14 & 15 South, R. 13 & 14 East which is a sandstone 16x12x6 ins above ground and marked and witnessed as described by the Surveyor General.

North Boundary T 15 S R 14 E
Blk.

Land mountainous
Soil rocky, and sandy loam
4th and 2nd grade.
Timber a few scattering pine
Mountainous land 79.71 ac.

July 22 1899

Boundaries of T 15 S R 14 E

Latitude, departures and closing errors.

Line, designated	true bearing	Distance	Latitudes		Departures	
			N	S	E	W
West boundary	80° 23' E	80.22		-80.22	.54	.54
	80° 23 W	80.04		80.04		.54
	South	321.35		321.35		
South boundary	East	480.00			480.00	
East boundary	North	480.00	480.00			
North boundary	789° 48' W	479.71	1.67			479.71
Convergence						.60
			481.67	481.61	480.54	480.85
				481.61		480.54
Error in lat.		.06	Error in dep.			.31

General Description
For general description see notes of
subdivision of this township

Frank Anderson.

Wiley A. Ware.

U.S. Dep. Surveyor.

No officer authorized to administer
oaths other than myself being
available without great inconvenience
delay and expense I administered
the required preliminary and final
oaths

Frank Anderson,
U.S. Dep. Surveyor.

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FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Frank Anderson & Hickey,
Alvare, United States Deputy Surveyor, to assist in running, measuring, and
marking the lines and corners described in the foregoing field notes of the survey of East and North Base,
Salt Lake City, Utah, 14th Meridian, 2nd Parallel,
owing the respective capacities in which they acted:

Clifton Draper, Chainman.
Eugraud Hippolyt, Chainman.
Pat Anderson, Moundman.
Geo. N. Hill, Moundman.
Scott Westfall, Axman.
Harmon Chander, Axman.
Milo Cuptin, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Frank Anderson & Hickey,
Alvare, United States Deputy Surveyor, in surveying all
those parts or portions of the East and North Boundaries of Township
10 1/2 South Range No. 14 East.

of the Salt Lake
Bear and meridian, in the State of Utah, which are represented
in the foregoing field notes as having been surveyed by him and under his direction; and that said survey
has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the
corner monuments established, according to the instructions furnished by the United States Surveyor
general for Utah.

Clifton Draper, Chainman.
Eugraud Hippolyt, Chainman.
Pat Anderson, Moundman.
Geo. N. Hill, Moundman.
Scott Westfall, Axman.
Harmon Chander, Axman.
Milo Cuptin, Flagman.

scribed and sworn to before me this 14
day of September, 1899 }



Frank Anderson
U.S. Deputy Surveyor.

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, _____, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from _____, United States Surveyor General for _____, bearing date of the _____ day of _____, 180_____, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for _____, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of _____
_____ of the _____
meridian, in the _____, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for _____, and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey; and should any fraud be detected, I will suffer the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

Franklin Anderson

United States Deputy Surveyor.

Subscribed by said _____, and sworn to before me }
this _____ day of _____, 180 }



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Valley City May 5th 1900
ac The East & North Boundary
of Township 15 South Range 4th East of the Salt Lake Base
Meridian Valley

executed by *Frank Anderson Hedges*, dated *September 3rd 1899*
under his contract No. *222*, dated *September 3rd 1899*, having been
critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Jacob B. Blair

United States Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in _____, has been correctly copied from the original notes on file in this office.

United States Surveyor General.

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FIELD NOTES

OF THE SURVEY OF THE

*Subdivision Lines**of**Township No. 15 South, Range No. 14 East**of the Salt Lake Base and Meridian,
in the State of Utah.*

AS SURVEYED BY

*Frank Anderson and Wilday A. Ware, United States Deputy Surveyor,
under his Contract No. 222 dated September 30th, 1898**Survey commenced July 24, 1899**Survey completed July 30th, 1899**Geo. W. Wright 20-02-72 ✓
3-94 ✓
Drawing**Andy J. H. Bailey - 6-01-61 ✓*

NAMES AND DUTIES OF ASSISTANTS.

Bilton Draper, Chairman

Eyrard Hippolyt, Chairman

Pat Anderson, Moundman

Geo. N. Hill, Moundman

Scott Westfall, Axeman

Harmon Okander, Axeman

Milo Cuplin, Flagman

BOOK A-256

INDEX DIAGRAM.

Township 15 South, Range 14 East

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Meanders Page

PRELIMINARY OATHS OF ASSISTANTS.

WE, Clifton Draper and Eugene H. Polyt
 do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of
 the subdivision lines of Township No. 15 South Range No. 14 East of the Salt Lake Base and Meridian in the State of Utah. Clifton Draper, Chairman.

Eugene H. Polyt, Chairman.

Subscribed and sworn to before me this

day of July, 1899



Frank Anderson

U.S. Deputy Surveyor

WE, Pat Anderson

and Geo. H. Hill

do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of
 the subdivision lines of Township No. 15 South of Range No. 14 East of the Salt Lake Base and Meridian in the State of Utah. Pat Anderson, Moundman.

William Sidwell, Moundman.

Subscribed and sworn to before me this

day of July, 1899



Frank Anderson

U.S. Deputy Surveyor

WE, Scott Westfall

and Harmon Chandler

do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey of
 the subdivision lines of Township No. 15 South of Range No. 14 East of the Salt Lake Base and Meridian in the State of Utah. Scott Westfall, Axman.

Harmon Chandler, Axman.

Subscribed and sworn to before me this

day of July, 1899



Frank Anderson

U.S. Deputy Surveyor

I, Milo Culpin

do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of the subdivision lines of Township No. 15 South of Range No. 14 East of the Salt Lake Base and Meridian in the State of Utah. Milo Culpin, Flagman.

Subscribed and sworn to before me this

day of July, 1899



Frank Anderson

U.S. Deputy Surveyor

Subdivision of T. 15 S. R. 14 E.

Survey commenced July 24th 1899
and executed with a W & L. E. Gurley
Light Mountain Transit the horizontal
circle having two double verniers placed
opposite to each other. and reading
to 1° of arc.

The instrument was examined, tested
in the true meridian at Salt Lake City
found correct and was approved by
the Surveyor General for Utah. Oct.
24th 1898

I examined the adjustments of the
transit and correct the level and
collimation errors.

That part of the country embraced
within the township, south of the
west tier, and east of the west tier is
of a precipitous, vastly rising ground, and
inaccessible nature and impracticable
of surveying, and subdividing.

The country situated between the
west tier and Palmas Head, which
is in Secs 2 - 11 - 14 - 23 - 26 & 36, is
steep, interspersed with box canyons,
which are inaccessible; the cliffs
being high and dangerous. This
country rises 4,000 ft in 4 miles.
The elevation of the west tier is
about 6000 ft, while that of Palmas
Head, at the U. S. Geological monument
is about 10,000 ft above sea level.

The water is scarce, and the
only water known to exist in the
T.P. is that in sec. 1 or 6, with the
exception of a small amount of strong
alkali spring, situated in that
part of Box Canyon which crosses
some where about the N.E. & S. line
between sec. 33 & 34.

I begin at the standard corner sec.
31 & 32 - and run $77^{\circ} 0' 3''$ N through

Sub division of T. 15 S. R. 14 E.
Chs.

	country cut by deep washes and valleys which are the spurs and front hills of the precipitous mountains that ascend rapidly about $\frac{1}{2}$ of a mile to the east.
50.53	Dry draws 3 to 6 ft. wide
40.00	Lst a sandstone 14 x 14 x 4 ins. 10 ins in the ground. for $\frac{1}{4}$ sec cor marked $\frac{1}{4}$ on W face and raised a round of stone 2 ft base $\frac{1}{2}$ ft high on W. of corner. This impracticable
46.15	Dry creek bed 18 ft. wide - draws $36^{\circ} W$
47.31	Tops of bank.
- 80.00	Lst a sandstone 16 x 12 x 6 ins 12 ins in the ground. for cor of sec. 29-30 31 & 32 and marked with 1 notch on S. and 5 notches on Edges, and raised a round of stone 2 ft base $\frac{1}{2}$ ft high W. of corner. This impracticable from which A pine tree 14 ins in diam bears $775^{\circ} 15' E$. 26 lbs. dist marked T 15 S R 14 E S 29 B.T.
	A cedar tree grows in drain bears $34^{\circ} 20' W$ 58 lbs. dist marked T 15 S R 14 E S 31 B.T. No other trees within limits. and mountainous.
	Soil alluvial and rocky 2nd & 4th ab. Timber scattered pine and cedars. Mountainous land 80,000 chs.
	July 24 th 1899
	West on a random line bet. sec. 30 & 31
40.00	Lst. trip $\frac{1}{4}$ sec cor.
79.95	Intruded west bay of sp. 9 ft. south of cor. of sec. 25-30-31 & 36 which

Sub-division of S. 15 S. R. 14 E.

	is a sandstone $4 \times 4 \times 3$ ft above ground. marked and witnessed as described by the surveyor General. Spur at. rd. N $89^{\circ} 36' E$ on a line between secs. 30 & 31.
S. 20	Wash drains NW.
36, 56	Wash drains SW.
39, 95	Set as sandstone $13 \times 12 \times 8$ ins. 8 ins in the ground. for $\frac{1}{4}$ cor. marked $\frac{1}{4}$ on N. face and raised a mound of stone 2 ft base $\frac{1}{2}$ ft high of corner.
	Plot impracticable from which a fine timber in drain banks.
	N $68^{\circ} 40' E$, 20 lbs dirt marked $\frac{1}{4}$ S 30 B. T.
	No other trees within limits.
	Through scattered cedar.
79, 01	Dry washes SW.
79, 95	Bottom of secs 29° 30' 31 & 32 Land mountainous. Soil $3^{\frac{1}{2}}$ & $4^{\frac{1}{2}}$ in. rate. Timber scattered pine and cedar Mountainous land 79, 95
	July 24-1899

	$\frac{1}{4} 0^{\circ} 03' W$ feet, secs. 29 & 30. over rough hilly ground. Draws 6 lbs each Drains. S $70^{\circ} W$
00, 38	Wash drains. S W.
9, 80,	Top of clay bluff bears. S & W.
25, 60	Set as Sandstone $14 \times 12 \times 5$ ins. 9 ins. in the ground. for $\frac{1}{4}$ cor. marked $\frac{1}{4}$ on W. face and raised a mound of stone 2 ft base $\frac{1}{2}$ ft. high off of corner.
	Plot impracticable
40, 37	Spurs from range of mountains to the wash beds. SW & SE.
63, 27	Bottom of dry creek bed. 9 lbs wide drains NW.

Subdivision of T 15 S R 14 E

76.32	Draw drains. W
- 80.00	Set of sandstone 24x16x6 ins 18 ins. in the ground. for cor. of sec. 19-20-29 & 30 marked with 2 notches on S. and 5 notches on E edges. and raised a mound of stone 2 ft base $\frac{1}{2}$ ft high W of corner. Its impracticable from which a fine tree 8 ins in diam. bears S 33° 10' E 71 lbs disk marked T 15 S R 14 E 829 B, T, No other trees within limits Land mountainous. Soil 3 $\frac{1}{2}$ and 4 $\frac{1}{2}$ ft. rate.
	Timber scattered cedars, and pines
	Mountainous land. 80.00
	July 24 th 1894

	W 89-56 W on a random line between secs. 19 & 30.
40.00	Set back $\frac{3}{4}$ sec cor.
79.90	Stretch west boundary of C. 7 the north of cor. of sec. 19-24-25 & 30 which is a sandstone 16 x 5 x 8 ins. above ground. marked and written as described by the Surveyor General. Hence, I. run S 89-59' E on a line line between secs. 19 & 30.
37.21	Wash drains. N.W.
39.90	Set of sand stone 13x12x8 ins 8 ins in the ground. for $\frac{1}{4}$ sec cor. marked $\frac{1}{4}$ on N face and raised a mound of stone 2 ft base $\frac{1}{2}$ ft high N. of corner. Its impracticable.
59.47	Draw drains. S.W.
59.76	Cedar timber begin. bears. N.E. & S.W.
- 79.90	The cor. of sec. 19 & 20-29 & 30 Land mountainous. Soil sandy and rocky 2 $\frac{1}{2}$ & 3 ft. rate. Timber cedars and pine

Subdivision of T 10 S R 12 E
Sec.

Sum timber at 20.24 chs.
Mountainous land. 79.90 chs.
July 25-1899

	70° 0' 3" W lat sec 19 & 20 through scattered cedars.
6.66	Dry wash 5 lbs wide drains W.
31.88	Top of bluff 25 ft high
35.65	Dry creek bed 23 lbs wide drains E 73° W
40.00	Lst. sandstone 18 x 12 x 5 ins. 12 ins in the ground. for 1/4 sec or marked 1/4 on W face and drains a mound of stone 2 ft base 1/2 ft high W of corner. It is impracticable from which a cedar tree lives in drain basin.
	568° 10' W 47 lbs. unmarked 1/4 S 44° 3.7, no other trees without basalts
80.00	Lst sandstone 20 x 20 x 18 ins. 15 ins in the ground. for cos to sec. 17-18-19 & 20 marked with 3 notches on S. and 5 notches on E edges and drained a mound of stone 2 ft base 1/2 ft high W of corner. It is impracticable
	Land mountainous Soil clay, sand, and rocky 3 1/2 x 4 1/2 nab Timber scattering cedars and pines. Mountainous land 80.00 chs July 25-1899

	789° 57' W on a random line between sec. 18 and 19.
40.00	Lst temp 1/4 sec. cor.
79.85	Intersect W part of dy. of sp. 120 lbs. South of the corner of secs 13-18 19 & 24 which is a sandstone 10 x 8 x 10 in above ground, marked and witnessed as described by the Surveyor General. When I set a sandstone

Subdivision of T, 5 S R 14 E

Obs.

	14x8x8 in. lies in the ground. For closing corner for sec. 18 & 19, marked 3-grooves on N & S. faces, and c.c on E face & raised a mound of stone 2 ft. base $\frac{1}{2}$ ft high E of cor. It's impracticable Destroyed marks on old cor. of secs. 13-16, 19 & 24, continuing to secs. 18 & 19 Thence we run S 89° 59' E or true line bet secs. 18 & 19.
19, 20.	Wash drains S. W.
39, 85	Set sandstone 15x12x8 in. 10 in. in the ground, for 1/2 sec cor. and marked. $\frac{1}{2}$ or $\frac{1}{4}$ ft. face, and raised a mound of stone 2 ft. base $\frac{1}{2}$ ft high. N of corner. It's impracticable
45, 34	Climb over bluff.
34, 59,	Enter dense cedar & pine timber along N. S.
- 79, 85	The cor. of secs. 17-18-19-20. Land mountainous.
	Soil sandy and rocky 3 ¹ / ₂ & 4 ¹ / ₂ in. ab. Timber cedar & pine Dense timber at 25-40 chs. Mountainous land. 79, 85 chs.
	July 25 th 1894

N 0° 03' W bet secs. 17 and 18 through scattered cedars.

2, 32.	Rim of basin bears E & W.
3, 99	Top of spur. bears E & W.
11, 57,	Top of bank.
15, 13	Center of dry creek bed 18 lbs. wide drains west.
33, 93	Any wash drains S 71° W
40, 00	Set a sandstone 18x12x6 in. 12 in. in the ground. for 1/2 sec cor. marked $\frac{1}{2}$ or $\frac{1}{4}$ ft. face, and raised a mound of stone 2 ft. base $\frac{1}{2}$ ft. high W of corner.

Subdivision of T15 S R14 E
Sec. 14

	Pits impracticable from which A cedar tree 6 ins in diam. bears 77 30° 10' E 6 lbs. dirt. marked $\frac{1}{4}$ S 17 B.T.
67.50.	A pine tree 10 ins in diam. bears 77 66° 15' W 6.5 lbs. dirt marked $\frac{1}{4}$ S 18 B.T.
80.00.	Center of dry creek bed 9 lbs. wide. drains $360^{\circ} W$.
	Set of sandstone $30 \times 8 \times 7$ ins. 22 ins in the ground. for cor to sec. 7-8-17-18 marked with 4 notches on S and 5 notches on E edges. and raised a mound of stone $\frac{1}{2}$ ft base $\frac{1}{2}$ ft high. West of corner.
	Pits impracticable from which A pine tree 7 ins. in diam. bears. S 22° 20' E 3.2 lbs. dirt marked T15 S R14 E S 17 B.T.
	A. cedar tree 4 ins in diam. bears. 77 81° 30' E 30 lbs. dirt marked. T15 S R14 E S 18 B.T.
	No other trees within limits. Land mountainous.
	Set sandy and rocky $3\frac{1}{2} \times 4\frac{1}{4}$ ft. Timber scattered pine & cedar. Mountainous. land. 80.00 chs.
	July 26 th 1899

	77 89° 59' W marauder line bet. sec. 7 & 18
40.00	Set lump $\frac{1}{4}$ sec cor.
79.80	Inclined west. Bdy of Tp. 135 lbs. Southeast of the cor. of sec. 7-12-13 & 18 which is a sandstone $20 \times 5 \times 8$ ins above the ground. marked and written as described by the Surveyor General. when I set a sandstone $14 \times 12 \times 6$ ins 10 ins in the ground. for closing corner for secs. 7 & 18 marked 2 grooves on S and 4 grooves on E faces and

Subdivision of T15 S R14 E

	c & on E face & raised a mound of stone fl base $\frac{1}{2}$ ft high. E of corner. Destroyed mark could not be found. It is impracticable from which A cedar tree 10 ins in diam bears. S 89° 40' E 54 lks. dirt marked.
	C.C. T15 S R14 E S 7 B.T. Stone W. m. S 89° 59' E in a turning but nos. 7 + 8. through scattered cedars and pines
22.36	Dry wash drains SW.
39.80	Lt sandstone. 12 x 10 x 6 ins. 8 ins in the ground. on $\frac{1}{4}$ sec cor. marked $\frac{1}{4}$ on N face and raised a mound of stone $\frac{1}{2}$ ft base $\frac{1}{2}$ ft high E of corner. It is impracticable from which A cedar tree 14 ins in diam bears. S 58° 20' W 29 lks. dirt marked
	S. 18 B.T. No other traps without birds.
44.52	Dry creek bed of Water Canon 18 lks. wide drains SW.
- 59.80.	The ford of mcs. 7 - 8 - 17 + 18 is on mountainous. Soil sandy and rocky 3 ft and 4 ft thick. Timber scattered - cedars and pines. Mountainous land. 79. 80 chs.

July 26 1899

	No° 03' W. lot nos. 7 + 8 through scattering cedars.
00.45	Tsp of spur bears. E + W.
5.06	Dry creek bed. 9 lks. wide drain W.
2 9.35	Dry creek bed. from Water Canon 12 lks. wide drain W.
41.00	Lt sandstone 24 x 12 x 6 ins 8 ins in the ground. on $\frac{1}{4}$ sec cor. marked $\frac{1}{4}$ on W face and raised a mound of stone 5 ft base $\frac{1}{2}$ ft high

Subdivision of T. 5 S. R. 14 E.

	West of corner Pits impracticable from which A pine tree 6 yrs in diam bears. S 75° 10' W 20 lbs dirt. marked T 15 S. R. 14 E S 7 B.T.
64.47	A pine tree 8 yrs in diam bears. S 31° 20' E 36 lbs dirt. marked T 15 S. R. 14 E S 8 B.T.
65.09	Dry wash. 6 lbs wide drains. S 55° W Top of bank 15 ft deep.
80.00	Set a sandstone 24 x 12 x 6 ins. 18 ins in the ground. in cor to sec. 5-6-7 & 8 and marked with 5 matches on the S and 5 matches on the E edges. and raised a mound of stone 2 ft base $\frac{1}{2}$ ft high. W of corner. Pits impracticable from which A cedar tree 8 yrs in diam bears. S 37° 10' W 41 lbs dirt. marked T 15 S. R. 14 E S 7 B.T.
	A cedar tree 12 ins in diam bears. S 57° 20' E 32 lbs dirt. marked T 15 S. R. 14 E S 8 B.T.
	A cedar tree 8 yrs in diam bears. N 16° 10' E 29 lbs dirt marked T 15 S. R. 14 E S 5 B.T.
	No other trees within limits. Land mountainous.
	Soil sandy and stony 2 nd & 3 rd rock. Timber scattered pine & cedar. Mountainous land. 8000 chs.

July 26-1899

40.00	7789° 39' W in a random line fit secs. 6 & 7. Set temple sec cor.
79.22	Intersect west Bdy of Sps. 139 lbs. S 5° 23' W of the cor of secs. 1-6-7 & 12 which is a sandstone 2x2x2 ft above ground. marked and witnessed as.

Subdivision of T15 S R14 E

Obs.

	as described by the Surveyor General When I set a sandstone 22x10x6. in. in the ground. top of sec. 6 & 7. and marked with 1 groove on N. and 5 grooves on S faces. and 2 c on E face and raised a mound of stone 2 ft base 1 $\frac{1}{2}$ ft high E of cor.
	<i>This impracticable</i> Disturbed marks on old cor of secs. 1-6-7 & 2 pertaining to secs. 6 & 7. Since I run 881905-9' E on a true line between secs 6 & 7.
4. 81.	Dry wash drains S.W.
35. 65	Dry wash drains N.W.
39. 22	Soil - a sandstone 10x12x6 ins. 12 in in the ground. fn 1/4 sec on. marked 1/4 on N face and raised a mound of stone 2 ft base 1 $\frac{1}{2}$ ft high N of cor. <i>This impracticable</i> In pr which. A pine tree 8 yrs old in Indian flats. N 26° 21' E 29 lbs. dist. marked 1/4 86739.
	N other trees within limits.
53. 90	Dry wash 50 lbs dep. drains S.W.
79. 22	The cor of secs. 5-6-7-8. Land mountainous, Soil sandy and stony 2 $\frac{1}{2}$ to 3 ft abt. Timber scattering cedars & pines, Mountains land. 79 $\frac{1}{2}$ S. chs.

July 26-1899.

July 26
At the cor of secs. 5-6-7 & 8 I
observe Polaris at 9 hrs. and 36 m
p.m. by watch. which is 21° fast
of local mean time and marked
the direction of Polaris by stick driven
in plug. 5 obs. A.M.

Subdivision of 150 R 14 E
Blks.

Anterior limit of obs. July 26th 9th 14.3^m
H. C. Polaris July 15th 17 44.6
Red & July 26. 39.2
H. C. Polaris July 26. 17-05.4 17-05.4
Hour angle of Polaris at obs. 16-08.9
23-56.1

Time argument for table II 7-47.
Azimuth of Polaris at obs. 1° 25' E
Right to back in plug and turn
1° 28' to the west - and run N 0° 03' W
on a random line between scts.
5 & 6 Variation 15° 55' E.

- 40.00 Set trap $\frac{1}{4}$ sec cor.
81.35 Intersect the N side of Sp. 2 lks
west of cor. of scts. 6-6-31432 which
is a sandstone set by me and
previously described.
Then cut river S 0° 03' E on
trap line between scts. 6 & 6.
Through scattered pine and cedar
Bottom of Whitman canon drains
S.W.
16.80 Wagon road from mounds to head
of Whitman canon bears N E or S W
21.72 Whitman creek 9 lks wide, inch deep.
drains S.W. and runs about 5 gals
per minute this time of year.
37.46 Rio Grande Western railroad track from
Sunny side to mounds. bears
S.W. & N.E.
41.35 Set grand stone 20x10x6 ins 15 ins
in the ground. for 1/4 sec cor. marked
 $\frac{1}{4}$ pm for face and raising cap around
stone 12 ft base 11 ft high W of corner
It is impracticable from which
A cedar tree 10 ins in diam bears
N 23° E. 91 lks dish marked 1/4 S 6 B. I
No other trees within limits.
70.79 Dry wash drains W
81.35 Cut cor of scts. 5-6-7 & 8.
Laid discontinuous.

Subdivision of S₁ S₈ R₁₄ E
612

Soil 2nd and 4th rate.
Timber pine & cedar.
Mountainous land \$1.35 acs.
July 27-1899.

- July 29-1899.
I dug up at cor. to sec. 5-6-7 & 8 and right to take up plug which marked the direction of an observation or Peafaris taken on July 26-1899, as shown in the preceding notes and turn to the East 88° 35' and my East on a random line cutting the temporary no. and sec cor. I intersect East boundary line of S₈. 9 fms south of cor. to sec. 1-6-7 & 12 west as described.
Then I run West on a true line but sec 1 & 2.
Crossed through dense pine and quaking asp.
70.22 Draw of course N.E.
34.88 Top of ridge bears $720^{\circ} W$ & $320^{\circ} E$
300 ft high.
3549 Described.
40.00 Set sandstone 22 x 20 x 5 ins. 16 ins in the ground. In $\frac{1}{4}$ sec cor. marked $\frac{1}{4}$ on top face, and raised a mound of stone 2 ft base $\frac{1}{2}$ ft high N of corner. It's impracticable to see which A pine tree 18 ins in diam bears $746^{\circ} 25' E$ $3\frac{1}{2}$ lbs dirt marked $\frac{1}{4}$ S 1 B T.
A pine tree 36 ins in diam bears $30^{\circ} 30' E$ 29 lbs dirt marked $\frac{1}{4}$ S 12 B T.
Leave dense timber.
48.58 Over cliff 20 ft high.
55.32 Gulch divides $326^{\circ} W$
Eastern side dense arborogamy brush.
Top of spur 38 lbs. with bears S 26 W

Subdivision of T15 S.R. 1/4 E.
Chs.

- ayd N 26° E
Leave dense mahogany under
brush.
- 73.27 Bottom of gulch 40 ft wide drains
S 20° E 250 ft deep.
- 74.97 Big ledges 15 and 20 ft high
80.00 Sub rounded stone 15 x 12 x 5 ins 10 ins
in the ground. for cor. to sec. 1-2-17
It marked with 3 notches on the
S and 1 notch on the E edges and
raised up ground of stone 2 ft face
1/2 ft high W of corner.
This ridge practicable from which
A pine tree 10 ins in diam bears.
S 81° 30' W 75 1/2 lks dist. marked
T15 S R 14 E S 11 P. T.
No other trees within limits
Land mountainous.
Soil 2nd & 4th rate.
Timber pine & quaking asp.
Dense timber and underbrush abt 6.81 obs.
Mountainous land 80.00 obs.
- July 29th 1899.

- 70 00' W on a random line bet
secs. 1 & 2.
Set temp 1/4 sec cor.
80.27 Intersect north boundary of sp.
1 lks East of cor. to sec 1-2-35-36
which is a sandstone set by an
and previously described.
Hence I have S 0° 01' E on true line
between secs. 1 & 6.
Ascend through dense timber
Spur 10 lks wide bears N 56° 10' E and
S 36° 10' W
15.30 Head of draw drains N 86° 10' E
17.08 Leave dense timber
Enter burnt pine and young
Quaking asp.

Subdivision of T, 5 SR 14 E

Sec.

17.84	From this point East 9 lks. to spring flowing 3 gals. per minute and drains $1\frac{1}{2} \times 86^{\circ} 10' E$
24.77	Top of ridge bears. $3 84^{\circ} E$ and $11 84^{\circ} W$ 450 ft high.
25.83	Descent enters scattering quaking asp and pine.
38.08	From this point a spring flowing 10 gals per minute bears. $3 15^{\circ} 45' W$ $125, 21$ chs. dist.
40.27	Silt sand stone $20 \times 12 \times 4$ ins 15 ins. in the ground. In $\frac{1}{4}$ sec cor. marked $\frac{1}{4}$ on W face and raised ground of stone 2 ft. base $\frac{1}{2}$ ft high W of corner It's impracticable
60.29	Drops over ledge 30 ft high 1 yard of gulch. drains. $3 21^{\circ} E$
71.66	Leave scattering timber
73.18	Enter underbrush.
80.27	Top of Sec. 1-2-11 & 12 and mountainous. Soil sandy loam and rocky $2\frac{1}{2} \times 4$ ins. Timber dense and scattering pine quaking asp and mahogany. Forest timber and underbrush at 24.17 chs. Mountainous land 80.27 chs.
July 29 th 1899.	

3.34	W. betw. sec. 9 and 11 ascend through underbrush.
17.74	Leave underbrush having 70×8 , Enter dense underbrush. bears 3×8 .
22.87	Trail from Spring bears $3 W$ and $71 E$.
29.08	Top of Palomas Mtn. Enter dense quaking asp and dead underbrush.
40.00	Silt sandstone $14 \times 10 \times 8$ ins. gives in this ground. In $\frac{1}{4}$ sec cor. marked $\frac{1}{4}$ on W face and raised a

Sept division of T 15 S R 14 E

	mount of stone 2 ft base $\frac{1}{2}$ ft high N of corner.
	Pits impracticable
	From this corner a triangulation instrument established by a corps of U. S. Geologic and Geodetic Surveyors Years $36^{\circ} 47' W$ 142.37 chs
55.89	Descend rapidly through scattered pines and cedars and ledges.
80.00	Set a survey stone 21x18x6 ins 15 ins in the ground. for cor to sup. 2-3-10+10. and marked with 5 notches on S and 2 notches on E edges. and raised a mound of stone 2 ft base $\frac{1}{2}$ ft high. W of corner Pits impracticable from which A pine tree 10 ins in diam bears $318^{\circ} 30' E$ 47 $\frac{1}{2}$ chs, ^{dark} marked T 15 S R 14 E S 11 B T.
	A pine tree 8 ins in diam bears N 47 $\frac{1}{2}$ W 62 chs. dark marked T 15 S R 14 E S 3 B T
	No other trees within limits.
	Land mountainous, Soil sandy loam and rock 1 st and 4 th order. Ponder pine. and quaking asp. Dense timber or undergrowth 44.37 chs Mountainous land 80.00 chs
	July 29 1899.

	No $01^{\circ} W$ on a random line between secs 2 & 3
40.00	Set bents $\frac{1}{4}$ sec for.
80.53	Indirect north boundary of 0 th . 2 chs. E of cor. & secs. 2-3-4-3-3-5 etc by me and previously described Thereon I run $80^{\circ} 02' E$ on tree line between secs 2 & 3.
	Descend through scattered pines and cedars and over ledges.

Subdivision of T15 SDR 14 E

	Beds.
9,47	Bottom of dry creek bed of south fork of Fisherville Canyon 300 ft deep.
10, 16	Scend. through dense pine and cedar timber and over numerous ledges.
28, 65	Ridge bias. E. & W. 530 ft high.
28, 95	Scend. over ledges and through scattering pine and mahogany. Timber
40, 53	Set sandstone 24 x 12 x 6 ins. 18 ins in the ground. on $\frac{1}{4}$ rec cor marked $\frac{1}{4}$ on W face and raised a mound of stone 2 ft base $1\frac{1}{2}$ ft high. W of cor. Rock imp. calcareous dark yellow. A post tree 26 ins in diam base 77 810 40' W 108 lbs pink marked $\frac{1}{4}$ 83 43.5, Mother tree within limits
45, 84	Gulch drains of $70^{\circ} W$ Scend through dense timber and over ledges.
53 68	Ridge bias. E. & W. 300 ft high.
56, 66	Scend.
67, 95	Gulch 13 fms wide drains W dryed. Large den timber
- 80, 53	The cor of recs 2 - 3 - 10 & 11. Land mountainous. Soil sandy & rocky 2 m + 3 ft. slate. Timber pine and cedar Den timber 40, 90. Mountainous land 80, 53 abs July 30 1899,

West between nos. 3 & 10
Descend.

26, 00	Spur ridge bias NW & S E. Enter scattered pine and cedar and good grazing land.
40, 80	Set sandstone 18 x 12 x 6 ins. 12 ins in the ground on $\frac{1}{4}$ rec cor. marked $\frac{1}{4}$ on W face and raised a mound of

Subdivision of T. 5 S R 14 E
Obs.

Stone 2 ft base $1\frac{1}{2}$ ft high N of corner
Pits impracticable from which
A pine tree 6 ins in diam bears
 $71^{\circ} 10' 2''$ 34.8 lbs dist. marked $\frac{1}{4}$ S
3 B.T.

No other tree within limits.

47.57 Draw 14 lbs with drains $71^{\circ} 15' 0''$ W

75.38 Logs scattered pine and cedars.

and enter dense quaking asp bearing
 $71^{\circ} 4' 8''$.

76.14 Draw drains $71^{\circ} 10' 10''$

77.40 Logs dense quaking asp timber

80.00 Ledge sandstone, 18 x 12 x 6 ins. 12 ins
in the ground. Gr cortex. nos. 3-4-9 & 10
marked with 3 notches on E and
5 notches on S edges, and raised
a few inches above 2 ft base $1\frac{1}{2}$ ft
high. W of corner.

Pits impracticable - From which

A pine tree joins in diam bears.
 $71^{\circ} 13' 20''$ E 21.5 lbs dist. marked

T 15 S R 14 E S 3 B.T.

A pine tree 6 ins in diam bears.

$71^{\circ} 18' 10''$ W 35 lbs dist. marked.

T 15 S R 14 E S 4 B.T.

A pine tree 10 ins in diam bears.
S $5^{\circ} 50' W$ 29 lbs. dist. marked.

T 15 S R 14 E S 9 B.T.

A pine tree 6 ins in diam bears.
 $5^{\circ} 40' 40''$ E 30 lbs dist. marked.

T 15 S R 14 E S 10 B.T.

Land mountainous.

Soil sandy loam and rocky 2 $\frac{1}{2}$ to 4 ft rate.

Timber pine and cedar & quaking asp.

Dense timber at 2 or 3 chs.

Mountainous land 80,000 chs.

July 30-1899.

$70' 2' W$ on a random line between
Ins 3 and 4.

Subdivision of T, 5 S R 14 E.

6 hrs.

40.00	Set traps. 1/4 sec cor.
80.79	Intersect north Boundary of S.P. 1/4 mi. west of cor. to sec. 3-4-3-3-9 34 Principle described True S. 0° 0' 2" E on a true line between sec. 3 & 4.
11.58	Ascend over ledges and rocks Center of dry creek bed of the South fork of Tidwell canon 5 fms wide 15 ft. deep. drains west. Depth of canon 350 ft.
12.85	Climb through heavy underbrush
37.53	Leave dense underbrush Enter dense pine timber
40.79	Set sandstone 24 x 12 x 6 ins. 18 ins in the ground. for 1/4 sec cor. marked 1/4 m N face and raised a mound of stone 2 ft base 1/2 ft high W of cor. This impracticable from which A pine tree 37 ins in diam bears N 84° 20' W 17 lbs dist. marked 1/4 34 RT.
45.19	Ridge bears. E & W 200 ft high.
45.55	Ascend over rough ledges. Enter scattering pine and cedar.
64.12	Dry creek bed of Water canon 15 fms wide drains W. 400 ft. deep. Climb.
- 80.79	The gr. of sec. 3-4-9-410. Land mountainous. Soil sandy and rocky 2 m x 4 m late. Scattered pine and cedar. Dear timber & underbrush ab. 32.70 cb. Mountainous land. 80.79 elev.
	July 30 th 1899.

West between sec. 4 & 9,

descend

Enter scattering pine and cedar.

40.00	Set sandstone 30 x 12 x 6 ins. 22 ins in the ground. for 1/4 sec cor. marked 1/4 m N face and raised a mound
-------	--

Subdivision of T. 5 S. YR 14 E
625

of stone 2 ft base $\frac{1}{2}$ ft high on
North of cor.

Pits impracticable from which
A pine tree 10 ins in diam bears.
S 84° 10' W 130. lbs dist marked
by 39 43°.

No other trees within limits

Drew drains N 31° W

80. 00 Lst sandstone 24 x 16 x 6 yrs. 18 ins
in the ground for cor of secs 45-8 & 9
marked with 4 notches on E and
5 notches on edges and raised
a round of stone 2 ft base $\frac{1}{2}$ ft
high W of corner

Pits impracticable from which
A pine tree 6 ins in diam bears.
S 87° 30' W 48.5 lbs dist marked
T 15 S R 14 E S 8. 13°.

No other trees within limits.

Gound mountainous.

Soil 2nd and 4th rate.

Timber scattered pine and cedar.

Mountainous land. 80. 00 acs.

July 30-1899.

N 0° 03' W on a random line between
secs 4 & 5

40. 00 Lst trees $\frac{1}{4}$ sec for

81. 06 Intersect north boundary of C. P.
1/4 east from cor to secs 4-5-32-33
Chance I saw S 0° 03' E on a tree
open top and 4th rate
through scattered cedars.

Described.

Bluff 51 ft high base E & W.

Center of bluff creek bed of Willow
Canyon 23 lbs drain -W.
380 ft dep.

Ground over good grazing ground

33. 75 C. P. of ridge base E & W 4. 00
ft high

Subdivision of T15 S R14 E
Blk.

	Enter scattered mahogany. Set sandstone 20x8x6 in., 15 in. in the ground. for $\frac{1}{4}$ section and marked $\frac{1}{4}$ on it face and raised a mound of stone 2 ft base $1\frac{1}{2}$ ft high west of corner Ridge windbreakable From which A pine tree 16 in. in diam bears $N 66^{\circ} 10' E$ 240 ft dist marked $1184^{\frac{1}{2}} P.T.$ $\frac{1}{4}$ pp strong trees without limbs Through cedar, pine and mahogany timber
49.09	Ascend over ledges.
72.90	Center of dry creek bed of Water Cañon 18 lbs wide 300 ft deep. From this point the mouth of a tunnel into coal measure bears $N 78^{\circ} 50' W$ 220 ft dist and an incline into coal measure bears $N 56^{\circ} 13' W$ 187 ft dist.
- 81.66	The corner to sec. 4-5-8 + 9 Land mountainous. Soil 2nd and 4th rate. Timber Cedars Mahogany & pine Mountainous land. 80.08 acs.
	July 31-1899
11.12	Went between steps 5 + 8 Descend through scattered cedars. and pine.
39.70	Center of dry creek bed of Water Cañon 13 lbs wide 300 ft deep. drains. SW
40.00	Top of ridge bears. N & S. 400 ft long Set sandstone 18x12x6 in 12 in. in the ground. for $\frac{1}{4}$ section marked $\frac{1}{4}$ on it face and raised a mound of stone 2 ft base $1\frac{1}{2}$ ft high north of corner Ridge windbreakable From which

Subdivision of S¹ 1/2 S. R 14 E
Blk.

A cedar tree 8 in. in diam. brays.
S 21° 50' W 23 lbs. disk marked
1/4 S. 8 B.S.

A pine tree 24 in. in diam. brays.
N 53° 40' E 36.5 lbs. disk marked
1/4 S. 5 B.S.

Descent.

Spiral rapidly over ledges.
The co. of recs. 5-6-7 & 8.

Land mountainous.

Soil 2" and 4" rate.

Timber scattered cedars and pines
Mountainous land 80,00 chs.

July 30-1899

	Resurvey of West boundary of 1/16 S. R. 14 E Lbs.
	From standard corner to 1/4 sec. 15 S. R. 13 1/4 E. A sandstone marked and witnessed as described by the Surveyor General I true north on a resurvey line between secs. 31 & 36.
40.00	The 1/4 sec cor. a sandstone marked and witnessed as described by the Surveyor General bears Eazt 23 lbs dist.
• 80.00	For cor to secs. 25-30-31 & 36 A sandstone marked and witnessed as described by the Surveyor General The true course of this line is therefore North 80.00 chs.
39.61	From the cor. to secs. 25-30-31 & 36 A sandstone marked and witnessed as described by the Surveyor General I true north on a resurvey line between secs. 25-30.
• 80.00	The 1/4 sec cor. A sandstone marked and witnessed as described by the Surveyor General bears E 23 lbs dist
	From the cor. to secs 19-24-25 & 30 A sandstone marked and witnessed as described by the Surveyor General The true course of this line is therefore North 80.00 chs.
40.23	From the cor to secs 19-24-25 & 30 A sandstone marked and witnessed as described by the Surveyor General. I true north on resurvey line bet. secs. 19 & 24
	The 1/4 sec cor. A sandstone marked and witnessed as described by

Survey of West Boundary of S. 15 S. R. 11 E.
Gads

the Surveyor General bears East
8 deg. 40 min. dist.

81.20 The cor. to secs. 13-18-19 & 24
A sandstone marked and witnessed
as described by the Surveyor General.
The true course and distance of
this line is therefore with 81.20 chs.

X From the cor. to secs. 13-18-19-24
I run north on a survey line
bet' secs. 13 + 18

40.05 The $\frac{1}{4}$ sec cor. A sandstone marked
and witnessed as described by the
Surveyor General bears East 10 deg. dist.

80.15 The sec cor. of secs. 7-12-13 & 18
A sandstone marked and witnessed
as described by the Surveyor General.
The true course and distance of
this line is therefore with 80.15 chs.

From the cor. to secs. 7-12-13 & 18
I run north on a survey line
bet' secs. 7 & 12.

40.35 The $\frac{1}{4}$ sec cor. A sandstone marked
and witnessed as described by the
Surveyor General bears East 20 deg. dist.

80.04 The sec cor. to secs. 1-6-7-12 a
Sandstone marked and witnessed
as described by the Surveyor
General bears East 5 deg. dist.
The true course and distance
of this line N. 0° 23' E 80.04 chs.

From the point 34 chs. west of cor.
to secs. 1-6-7-12

I run north on a survey line
bet' secs. 1 & 6.

39.98 The $\frac{1}{4}$ sec cor. A sandstone

Runnymede of West Boundary of S. 5 S. R. 14 E
Chas.

marked and witnessed as described
by the Surveyor General has
Except 2.5 acres. dist.
C 80.22 The corner Opp. 14 & 15 S R. 13-14 E
A sandstone marked and
witnessed as described by the
Surveyor General,
The true course and distance
of this line is N 0° 23' W 80.22 chs.

Volume

#

R0256

Subdivision of Sps. 15 & R 14 E

"General Description"

The portion of this township covered by this survey is mountainous land and in the north part of sections very rough and broken.

The formation of this country is sandstone and intercalated by shales and in the middle of the seas by coal measures. On the North side of Tidwell and Watty Canons the country is broken into high precipitous cliffs and ledges. On the South sides of these canons the country is covered with good grazing, making that part of the top of Mira Land that part of the country embraced in Sec. 1, good range land for cattle.

There is some timber of good size situated in Sec. 1.

The west part of sec would be good agricultural ground if water could be secured in sufficient quantities for irrigation. That part of sec 6 which is cultivated by means of the water from Whitmills canon is very productive.

There are no quarries within the sps. nor any other indications of mineral other than coal.

From the prospect and development work performed in sec 3 a small vein of coal has been uncovered and from indications and outcrops I would consider the following sec. to be coal lands. Secs. 3-4 & 5;

Subdivision of T.R.S. R 14 E

The following are the only improvements
of settlers which we have been able
to note situated in this Township
and all in the West $\frac{1}{2}$ of sec 6.

Ghorm barn corral and out-
houses - and cultivated land
Claimed by Geo C. Whitmore &
Vance 1000.00

There was found no trace of any
other improvements as made by
the other applicants.

John P. Tidwell
Joseph P. Tidwell
Geo. C. Whitmore
John and Joseph Tidwell claim
Sec 32 Ch. 14 S R 14 E.

Frank Anderson
Wiley H. Ware
U.S. Dep. Surveyors.

No officer authorized to administer
oaths other than my self being
available with out great inconvenience
delay and expense, I administer
the required preliminary and
final oaths.

Frank Anderson,
U.S. Dep. Surveyor.

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FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Frank Anderson & Hilday H. Hale,
United States Deputy Surveyor, to assist in running, measuring, and
marking the lines and corners described in the foregoing field notes of the survey of the subdivision lines
Township No. 15 South of Range No. 14 East of the Salt Lake Base and Meridian,
showing the respective capacities in which they acted:

Clifton Draper, Chainman.
Ezraud Hippolyt, Chainman.
Pat Anderson, Moundman.
GEO. N. Hill, Moundman.
Scott Westfall, Axman.
Harmon Anderson, Axman.
Milo Culpin, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Frank Anderson & Hilday H. Hale, United States Deputy Surveyor, in surveying all
those parts or portions of the subdivision lines of Township No. 15 South
Range No. 14 East,

of the Salt Lake
base and meridian, in the State of Utah, which are represented
in the foregoing field notes as having been surveyed by him and under his direction; and that said survey
has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the
corner monuments established, according to the instructions furnished by the United States Surveyor
general for Utah.

Clifton Draper, Chainman.
Ezraud Hippolyt, Chainman.
Pat Anderson, Moundman.
GEO. N. Hill, Moundman.
Scott Westfall, Axman.
Harmon Anderson, Axman.
Milo Culpin, Flagman.

Subscribed and sworn to before me this 14
day of September, 1899.



Frank Anderson,
U.S. Deputy Surveyor.

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, _____, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from _____, United States Surveyor General for _____, bearing date of the _____ day of _____, 180_____, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for _____, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of _____ of the _____ meridian, in the _____, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for _____, and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey; and should any fraud be detected, I will suffer the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

Frank Anderson
United States Deputy Surveyor

Subscribed by said _____, and sworn to before me }
this _____ day of _____, 189_____ }



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

*Frank Anderson & H. W. Moore, May 5th 1900
Surveyors of the Township 15 South
Range 14 East of the Bald Lake Base & Meridian, Etc.*

executed by Frank Anderson & H. W. Moore,
under his contract No. 222, dated September 30th, 1898, having been
critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Jacob T. B. Blanchard
United States Surveyor General

I certify that the foregoing transcript of the field notes of the above-described surveys in _____, has been correctly copied from the original notes on file in this office.

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BOOK A-256

FIELD NOTES

OF THE ^{RE-} SURVEY OF THE

East, North and West Boundaries

of
Township No. 14 South, Range No. 14 Easton the Salt Lake Base and Meridian,
in the State of Utah

AS SURVEYED BY

Frank Anderson and Wilday H. Hare, United States Deputy Surveyor.
Washington Oct 27 1898Under their Contract No. 222 dated September 30th, 1898

Survey commenced August 3, 1898

Survey completed August 17, 1898

S. 1/2 N. 1/2 S. 1/2 N. 1/2

N. 1/2 S. 1/2 S. 1/2 N. 1/2

W. 1/2 S. 1/2 S. 1/2 W. 1/2

NAMES AND DUTIES OF ASSISTANTS.

Clifton Draper, Chairman,

Eyrard Hippolyt, Chairman,

Pat Anderson, Moundman,

Geo. H. Hill, Moundman,

Scott Westfall, Axeman,

Harmon Okander, Axeman,

Milo Cuspin, Flagman.

BOOK A-256

INDEX DIAGRAM.

Township No. 14 South, Range 14 East

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30	20	28	27	26	25
31	32	33	34	35	36

Meanders Page _____

PRELIMINARY OATHS OF ASSISTANTS.

WE, Clifton Draper

and Ezra and Hippolyt

do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of the East North and West Boundaries of Township No. 14 South Range No. 14 East of the Salt Lake Base and Meridian in the State of Utah. Clifton Draper, Chainman. Ezra and Hippolyt, Chainman.

Subscribed and sworn to before me this fifth }
day of July, 1899 }



Frank Anderson

U.S. Deputy Surveyor

WE, Pat Anderson

and Geo. N. Hill

do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of the East North and West Boundaries of Township No. 14 South Range No. 14 East of the Salt Lake Base and Meridian in the State of Utah. Pat Anderson, Moundman. William Endwell, Moundman.

Subscribed and sworn to before me this fifth }
day of July, 1899 }



Geo. N. Hill

Frank Anderson

U.S. Deputy Surveyor

WE, Scott Westfall

and Harmon Okander

do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey of the East North and West Boundaries of Township No. 14 South Range No. 14 East of the Salt Lake Base and Meridian in the State of Utah. Scott Westfall, Axman. Harmon Okander, Axman.

Subscribed and sworn to before me this fifth }
day of July, 1899 }



Frank Anderson

U.S. Deputy Surveyor

I, Milo Cuyler, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of the East North and West Boundaries of Township No. 14 South Range No. 14 East of the Salt Lake Base and Meridian in the State of Utah.

Milo Cuyler, Flagman.

Subscribed and sworn to before me this fifth }
day of July, 1899 }



Frank Anderson

U.S. Deputy Surveyor

West Boundary T 14 S R 14 E

Previous to commencing the survey
of the exterior Bds of this township
I retrace same searching diligently
at the proper places for N. Sec., Sec. and
Tps. corners but fail to find any trace
of same and do not believe they were
ever set I therefore proceed to
survey same as follows.

Survey commenced Aug 2nd 1899
and executed with a W & L. E. Gurley
light mountain transit with horiz mt.
spur having two double verniers placed
opposite each other and reading to
1 minute of arc.

The instrument was examined tested
on the true meridian at Salt Lake City
Utah found correct and was approved
by the Surveyor General for Utah Oct 24
1898

I began at the cor of Tps 14 and 15 S
R 13 and 14 E which is a sandstone
16 x 12 x 6 ins above ground firmly set
and marked and witnessed as
described by the Surveyor General.

Aug 2nd 1899 at 4 h and 32 m A.M.
by my watch which is fast 21 min 4 sec
of local mean time I observed
Polaris and marked the direction
thus determined by a tack driven
in a plug 4.5 lbs. to the north of
corner.

Antom l. mt. of obs. Aug 2nd 16^m 10^s
U. G. Polaris Aug 1st 16^m 38^s

Hour angle of Polaris at obs. 16 - 38
23 - 32.3
23 - 56.1

Time argument 0 23.8
Azimuth of Polaris at obs. $0^{\circ} 10.5' E$
Later I sighted to tack in plug and
turned left $0^{\circ} 10'$.

Variation $16^{\circ} 03' E$. and run
North between Secs. 31 & 36

West Boundary T14S R54E

	Through cedars
44.60	No trace of old corner Lst sand stone 15x8x6 ins 10 ins in the ground for $\frac{1}{4}$ sec cor marked $\frac{1}{4}$ on E face and raised a mound of stone 2 ft base $\frac{1}{2}$ ft high w.e. of cor Pits impracticable from which cedar tree tops in diam. bars $S 63^{\circ} 05' E$ 26 lbs dirt marked $\frac{1}{4} S 31 B T$
	A cedar tree tops in diam. bars $S 7^{\circ} 48' W$ 26 lbs. dirt marked $\frac{1}{4} S 36 B T$
68.73	Center of dry creek bed of gulch drains S.W. Depth 100 ft.
79.64	Ascend
80.00	No trace of old corner Lst sand stone 17x8x5 ins 12 ins in the ground for cor boxes 25-30-31 & 36 marked with 1 notch on S. and 5 notches on the N. edges and raised a mound of stone 2 ft base $\frac{1}{2}$ ft high w.e. of cor Pits impracticable from which aspin tree 10 ins. in diam. bars $S 51^{\circ} 40' W$ 65 lbs dirt marked T14S R13 E S 36 B T.
	No other trees within limits
	L and mountainous
	Soil $\frac{2}{3}$ red and $\frac{1}{3}$ slate
	Timber Cedars and Pines
	Mountainous land 80.00 chs.
	Aug 2 nd 1899

	North between sec. 25 and 30
	Ascend rapidly over rough ground
	Crosses cliffs and through cedars and pines
27.10	Top of ridge bears E and W 220 ft high
27.33	Ascend
40.00	No trace of old corner Lst sandstone 15x10x4 ins 10 ins in the ground for $\frac{1}{4}$ sec cor marked

West Boundary T 14 S R 14 E

marked $\frac{1}{4}$ on w face and raised a
round of stone 2 ft. base $1\frac{1}{2}$ ft high w of
corner.

Pts impracticable from which
A pine tree 6 ins in diam bears
N 27° 31' E 32 lbs - dirt marked $\frac{1}{4}$ sec B.T.
45.34 ^{no other trees up to limits}
Draw draws S. W.

Cascad.

80.00 No trace of old corner.

Sift sandstone $19 \times 8 \times 6$ ins 14 ins in
the ground. Long cor to sec 19-24-25 & 30
marked with 2 notches on S. and 4
notches on N. edges and raised to ground
of stone 2 ft base $1\frac{1}{2}$ ft high. W of corner.
Pts impracticable from which

A pine tree 16 ins. in diam bears.

342° 50' E 36 lbs - dirt marked
T 14 S R 14 E S 30 B 5

A cedar tree 14 ins in diam bears
S 1° 10' W 29 lbs - dirt marked
T 14 S R 13 E S 25 B 5

A pine tree 18 ins in diam bears
N 16° 20' E 38 lbs - dirt marked
T 14 S R 13 E S 24 B 5.

No other trees within limits.

Land mountainous,

Silt 3rd and 4th rates

Timber pines and deodars.

Mountainous land 80.00 ac.

Aug 3rd 1899

North but sec 19-24

Cascad.

3.71 Top of ridge bears N E & S W. 225 ft high

4.44 Descend, cliffs and ridges.

3.92 Vertical cliff 30 ft high.

40.00 No trace of old corner.

Sift sandstone $30 \times 14 \times 6$ ins 22 ins in
the ground for $\frac{1}{4}$ sec cor marked

$\frac{1}{4}$ m w face and raised a round
of stone 2 ft base $1\frac{1}{2}$ ft high W

West Boundary T14 S R 148

chis.

	<p>of corner. Site impracticable from which A pine tree 14 ins in diam bears $\text{S} 60^{\circ} 30' \text{W}$ 7 lks dist. marked $T 14 S R 13 E S 24 B.T.$ No other trees within limits.</p>
40, 10	Cliff drops down 30 ft.
40, 75	Bottom of gulch drains W 400 ft dips.
41, 66	Ascend ledge 30 ft high.
67, 75	Top of ridge bears E and W 380 ft high
67, 91	Descent
-	Enter dense pines.
80, 00	No trace of old corner. Set gauntlet 40 x 25 x 8 ins 30 ins in the ground, for coults secs 13-18-19-24 and marked 3 notches on S and 3 notches on N edges and raised from ground & stone 2 ft to one $\frac{1}{2}$ ft high w of corner. Site impracticable. From which A pine tree 14 ins in diam bears $\text{S} 63^{\circ} 30' \text{W}$ 36 lks dist marked $T 14 S R 13 E S 24 B.T.$ A pine tree 13 ins in diam bears $\text{N} 40^{\circ} 30' \text{W}$ 23 lks dist. marked $T 14 S R 13 E S 13 B.T.$ A pine tree 18 ins in diam bears $\text{N} 10^{\circ} \text{E}$ 35 lks. dist marked $T 14 S R 14 E S 18 B.T.$ No other trees within limits Land mountainous, Soil $2\frac{1}{2}$ and $4\frac{1}{2}$ feet, Timber dense Pine Mountainous land 80, 00, chis.
	Aug 4-1899

4, 82

With steppe secs. 13 & 18
Through dense pines.
Gent drain W
Ascend.

West Boundary T 14 S R 14 E
S. W.

- 28.68 Tops of mica, greenish brown
At an elevation of about 500 ft
above sea level.
Leave dry timber
40.00 No trace of old corner.
Sift sand stone 15 x 16 in x 11 in in
the ground for 1/4 sec. marked
1/4 on W face and raised a mound
of stone 2 ft base 1/2 ft high at
corner.
Ribs impracticable. From which
A pine tree 8 in in diam. bears
N 5° 38' W 176 lbs. dist. marked
T 14 S 13 B 9.
No other trees within limits.
From this 1/4 sec. east a spring running
about 1 gal per minute bearing N 29° 0' E
17,28 chs.
44.13 Leave quaking asp timber
Cross over gradual rise
72.38 Enter dense quaking asp timber
No trace of old corner.
Sift sand stone 14 x 10 x 4 in. 4 min.
in the ground, for 1/4 sec. nos 7-12-13-14
marked with 4 notches on 3 and 2
notches on 1 edges and raise a
mound of stone 2 ft base 1/2 ft high
at corner.
Ribs impracticable. From which
A quaking asp tree 8 in in diam. bears
N 85° 20' E 17 lbs. dist. marked
T 14 S R 14 E S 17 B 5.
A quaking asp tree 8 in in diam. bears
S 22° 10' E 26 lbs. dist. marked
T 14 S R 14 E S 15 B 5.
A quaking asp tree 8 in in diam. bears
N 23° 15' W 136 lbs. dist. marked
T 14 S R 14 E S 12 B 5.
No other trees within limits.
Land mountainous
Soil; 2nd and 4th rate,

West Boundary T 4 S. R 14 E.

	Timber dense pines and quaking asp. Mountainous land. 8,000 ft Aug. 3-1899
10,68	With interval steps. 7 and 12 descend through dense quaking asp. timber Gulch 11 lbs wide - drains N. E. 180 ft deep. Leave quaking asp. timber ascend
24,32	Top of spur ridge 89 ft high bears N.E. and S.W.
25,28	descend
26,78	Enter dense scrubby quaking asp. timber
34,22	Gulch 8 lbs wide 140 ft deep drains E Leave quaking asp. timber ascend
40,00	No trace of old corner. Silt sandstone 22+12+4 ins 16 ins in the ground for $\frac{1}{4}$ sec cor. and marked $\frac{1}{4}$ on W face and raised a mound of stone 2 ft base 1 $\frac{1}{2}$ ft high W of corner Pile impracticable No traces in mud
41,14	Top of spur bearing N.E. and S.W. 210 ft high
41,29	descend
45,63	Enter dense quaking asp.
54,12	Draw 13 lbs wide drains E ascend
57,87	Dense quaking asp. end. Enter dense bunchbrush
62,23	Top ridge bears E and W 150 ft high
62,38	descend
66,24	Enter dense quaking asp.
80,00	No trace of old corner. Silt sandstone 24x6+5 ins 18 ins in the ground by cor to secs. 1-6-7-8-12 marked with 5 notches on S and 1 notch on N edge and raised a mound of stone 2 ft base 1 $\frac{1}{2}$ ft high W of corner

Wpt Boundary T14 S. R14 E
Obs.

Pits impracticable - from which
a quaking asp tree 6 ins in diam
bears. $0^{\circ} 53' 40'' E$ 12 lks dist. marked
T14 S R 14 E S 7 B.T.

A. quaking asp tree 7 ins in diam
bears. $0^{\circ} 40' W$ 20 lks dist. marked
T14 S R 13 E S 12 B.T.

A quaking asp tree 6 ins in diam
bears. $0^{\circ} 36' 40'' W$ 38 lks dist. marked
T14 S R 13 E S 13 B.T.

Other trees within limits:

Land mountainous

Sil. 1st. and 3rd rate.

Timber dense quaking asp

Mountainous land so. so. char.

Aug 6th 1889

With between obs 1 & 6

Through dense quaking asp.

Least dense quaking asp.

Center of creek 8 lks wide with 1 inch
of water drains S E, at bottom of
Whitmores Canyon 476 ft deep.

Wagon road bears S E

Arund.

Ridge bears. S W. and N E

Arund.

Extly scattering pines and cedar

Gulch 15 lks wide dis. S W. 140 ft deep.

Arund.

No trace of old corner.

Set sandstone 26 x 6 x 6 ins. 18 ins in
the ground. In $\frac{1}{2}$ sec cor and marked

$\frac{1}{4}$ front face and raised a mound

of stones 2 ft base $\frac{1}{2}$ ft high W of corner

Pits impracticable

No trees within limits.

Draw drains W

Arund.

Spur ridge 20 lks wide 130 ft high.

Arund.

W.M. Boundary T14S. R14E

	bears N E and S W. Draw drains N W. Top of ridge 210 ft high bears N W & S E Descend. No trace of old corner.
67.01	
78.78	
80.00	Set a sandstone 24x10x6 ins 18 ins. in the ground. for cor & townships 13 - and 14 S. Ranges 13 and 14 E marked with notches on each edge and 13 S on N E - 14 E on S E. - 14 S on S W and 13 E on N W faces. and raise amount of stone 2 ft base $\frac{1}{2}$ ft high S of corner Dig impracticable Land mountainous Soil 2 nd and 3 rd rate Timber. pines, cedar, and quaking asps. Mountainous land 80.00 Chrs.
	Aug 6 th 1899,

L

East Boundary of T14S R14E
Chs.

Survey commenced Aug 8th 1899
We examined the adjustments of the
transit and correct the level and
collimation errors.

At the corner of Tps. 14 and 15 S,
R 14 and S-E Latitude $39^{\circ}3'3''N$
Longitude $110^{\circ}20'W$, we set instrument
and sight to back prairie in stake
which marked the direction of an
observation on Polaris July 18th 1899
Azimuth West $50^{\circ}33'$ to line North line
From this Township corner already
described we run north between
Secs. 31 & 36, Va $15^{\circ}59' E$.

Through scattering pines and mahogany

Enter dense pine timber

Enter Mahogany grove

Over stiff boulders.

Small ridge bears E & W 120 ft high

40,000 ft face of old corner.

Lift up and store 30x18x16 ins 22 ins
in the ground for $\frac{1}{4}$ sec cor. and
marked $\frac{1}{4}$ on W face and raised
around of stone 2 ft base $1\frac{1}{2}$ ft.
high W of corner.

Pits impracticable from which

a pine tree 12 ins in diam. bears
 $N 73^{\circ}30'W$ 234 lbs. dish marked

$\frac{1}{4} S 36 B T$.

A pine tree 14 ins in diam. bears.

$N 31^{\circ}30'E$ 40 lbs. dish marked

$\frac{1}{4} S 37 B T$.

No other trees within limits.

Enter dense pines bearing E & W

Enter quaking asp and pine timber

Large Indians S. W. of section line

Tops of ridge bears E and W 150 ft high

Enter dense pine and mahogany
timber

Second

Enter dense quaking asp timber

27.97

30.97

32.84

34.97

40.00

East Boundary T14 S R14 E

- 80.00 No trace of old corner
 Set a sandstone 16x13x6 ins. 11 ins
 in the ground for corner of secs 25-30
 31 & 36 marked with 1 notch on S and
 5 notches on N edges, and raise a
 mound of stone 2 ft. tan 1 $\frac{1}{2}$ ft high
 W of corner.
 It is impracticable - from which
 A crackling asp tree 8 ins in diam bears
 $37^{\circ} 50' 25'' E$ 14 lbs dist. marked
 T 14 S R 15 E S 30 T 37.
 A crackling asp tree 6 ins in diam
 bears $8^{\circ} 39' 35'' W$ 2 lbs dist. marked
 T 14 S R 14 E S 36 T 37.
 No other trees worth in bunches
 Land mountainous
 Soil 2 $\frac{1}{2}$ ft and st. later.
 Timber pine mahogany and
 crackling asp.
 In mountainous land. 80.00 chp.
 Aug 8th 1899
- North between secs 25 and 30
 Descend.
- 2.97 Bottom of draw 4 lbs wide drains N.W.
 11.04 Gulch 5 lbs wide - drains W 180 ft deep
 Ground.
 Leave dense crackling asp and enter
 more underbrush and scattering pine.
- 34.34 Ridge bears E and W 140 ft high.
 35.60 Descend.
- 37.07 Leave dense underbrush
 Enter dense crackling asp and pine timber
 40.00 No trace of old corner
 Set a sandstone 14x12x8 ins. 9 ins in
 the ground for $\frac{1}{4}$ sec cor. marked $\frac{1}{4}$ m
 W face and raised a mound of
 stone 2 ft. tan 1 $\frac{1}{2}$ ft high W of corner
 It is impracticable - from which
 A crackling asp tree 5 ins in diam. bears
 $71^{\circ} 41' 25'' W$ 2.15 lbs. dist. marked $\frac{1}{4}$ S 25 T 37.

East Boundary T14 S. R 14 E.
Obs.

	No other trees within limits
246.15	Draw 10 lks wide drains $71^{\circ}38'20''W$
52.01	Draw 7 lks wide drains $87^{\circ}30'W$
-	Leave dense timber enter dense underbrush over ledges and through scattering timber no trace of old cabin
80.00	Set of sand stone 23x2 x 4 ins. 17 ins in the ground. for cov. of secs. 19-24-25 + 30. marked with 2 notches on S and 4 notches on N edges and raise compound of stone 2 ft base $1\frac{1}{2}$ ft high w of corner. This impracticable - from which A quaking asp tree 6 ins in diam bears. $71^{\circ}29'25''E$ 63.6 lks dist marked T14 S R 15 E S 19 B.T.
	A pine tree 12 ins in diam bears $85^{\circ}15'E$ 114. lks. dist marked T14 S R 15 E S 30 B.T.
	No other trees within limits
	S and imperturbous Soil $2\frac{1}{2}$ and $3\frac{1}{2}$ rate.
	Timber pines and quaking asp. Mountainous land 80.00 obs.
	Aug 9 th 1899

North between secs. 19 + 24

Ascend.

1.55	Ridge bears $71^{\circ}67'30''E$ and $87^{\circ}67'30''W$ 180 ft high.
2.63	Enter dense quaking asp and pine timber.
	Descend.
12.76	Draw 11 lks wide drains $87^{\circ}20''W$
24.04	Draw drains $88^{\circ}0'W$
	Ascend
	Leave dense quaking asp and pine timber
28.22	Ridge bears $8.4W$ 205 ft high
33.41	Descend.

East Boundary T14 S R14 E

- Enter dense timber
 40.00 In trace of old corner
 Set up sandstone 17 x 12 x 4 ins 12 ins
 in the ground for cor. 1/4 sec cor marked
 1/4 on W face and raised a mound
 of stone 2 ft base 1/2 ft high W of
 corner.
 Bits impracticable from which
 A pine tree 30 ins in diam bears
 $71^{\circ} 17' 25'' W$ 16.9 lbs dist marked
 $S 24^{\circ} 13.7'$
 $\frac{1}{4}$ other trees within limits
 40.92 Leave dense timber and enter
 scattering timber
 42.40 Drawn 8 ins wide draining SW.
 Ridge 76 lbs. wide bears E 140 ft high.
 Enter dense timber
 65.96 Draw drains fw
 65.96 Leave dense timber
 - 80.10 In trace of old corner
 Set up sandstone 18 x 8 x 7 ins 12 ins in
 the ground. for cor. It sec. 13-18-19 & 24
 marked with 3 notches on S and 3
 notches on N edges and raised a
 mound of stone 2 ft base 1/2 ft high
 W of corner.
 Bits impracticable from which
 A pine tree 8 ins in diam bears
 $52^{\circ} 35' E$ 67 lbs dist marked
 $T 14 S R 15 E S 19 B.T.$
 $\frac{1}{4}$ other trees within limits
 Sand mountainous
 Soil 2nd and 4th rate
 Timber Pine and Quaking asp.
 Mountainous land 80,000 acs.

Aug 9th 1899

North between Secs 13 & 18

East Boundary T14S, R 14 E
lchs.

- 3.36 Ridge bears S.W + N 270 ft high
Enter dense pine and quaking asp
timber
Along side of ridge
Enter dense quaking asp timber
Enter Range Creek mesa
No trace of old corner
Lie of sandstone 94 x 8 x 8 ins. 18 ins
in the ground for 1/4 acre marked
1/4 m. ft. face and raised a mound
of stone 2 ft base 1/2 ft high W of corner
Pits impracticable - From which
A quaking asp tree 14 ins in diam
bears 7768 150° W 114 lbs dist marked
1/4 S 13 B.T.
No other trees within limits
Dense timber ends
Enter scattering timber
Enter dense timber
No trace of old corner
Lie of sandstone 93 x 7 x 5 ins 18 ins
in the ground for cor of sec 7-12-13 918
marked with 4 notches on S and 2 notches
on N edges and raised a mound of
stone 3 ft base 1/2 ft high W of corner
Pits impracticable - From which
A quaking asp tree 14 ins in diam
bears 526° 120° W 7 lbs dist marked
T14S R14E S 13 B.T.
A quaking asp tree 12 ins in diam
bears 347° 60° E 29.1 lbs dist marked
T14S R15E S 18 B.T.
A Balsam tree 6 ins in diam bears
N 12° 20° E 23 lbs dist marked
T14S R15E S 7 B.T.
No other trees within limits
Land mountainous.
Soil 2nd and 3rd rate
Timber Pines, quaking asp and Balsam
Dense timber 57, 20 chs.
Mountainous land 80.00 chg.
Aug 10 1899.

East Boundary T14 S. R14 E
Lbs.

- North between secs. 7 & 12
Through dense pines and quaking asp.
timber.
- On Range Creek Mesa
- 40.00 No trace of old corner
Set a sand stone 24 x 6 x 6 ins 18 ins
in the ground for $\frac{1}{4}$ sec cor, marked
 $\frac{1}{4}$ on W face and raised a mound
of stone 2 ft base $\frac{1}{2}$ ft high W of corner
Pits impracticable. From which
A quaking asp tree 8 ins in diam
bears $5445^{\circ} 30' E$ 15.2 lbs dish marked
 $T14 S 12, T13, R.$
- No other trees within limits
- 71.78 Leave dense timber
- 80.00 Enter scattering timber
No trace of old corner
Set a sand stone 15 x 13 x 4 ins 10 ins
in the ground for cog of secs 1-6-7 & 12
marked with 5 notches on 3 and 1 notch
on 2 edges. and raised a mound of
stone 2 ft base $\frac{1}{2}$ ft high W of corner
Pits impracticable. From which
A pine tree 47 ins in diam bears
 $7141^{\circ} 50' E$ 173.2 lbs dish marked
T14 S R 15 - E 36 T.B.T.
- No other trees within limits
- Land level
- Soil 2 in $\frac{1}{4}$ in rate
- Timber Pines = quaking asp.
Dense timber 71.78 chs.
- Mountainous land 80.00 chs.
- Aug 11th 1897

- North between secs 1 & 6
- 4.50 Enter dense Pine and quaking asp.
timber
- 13.41 Leave Range Creek Mesa
Descent

East Boundary T₁₄S R₁₄E
On.

40.00	No trace of old corner Set a sandstone 14 x 11 x 4 ins 10 ins in the ground. for 1/4 sec cor. marked 1/4 on W face and raised a mound of stone 2 ft base 1/2 ft high W of corner It's impracticable from which A red pine tree 7.6 ins in diam bears N 20° 30' W 19.9 lbs. dist. marked 4 S 1 B.T.
56.70	No other trees within limits. Sagecreek bed of Gulch 20 lbs wide drains N.E. 230 ft deep. Leave dense timber
60.97	Enter scattered timber
80.00	Leave scattered timber No trace of old corner. Set a sandstone 30 x 12 x 5 ins 22 ins in the ground. for cor of Sps. 13 and 14 S R's 14 and 15 E marked 14 E on NW - 13 S on NE 15 E on S E and 14 S on S W faces with 6 notches on each edge and raised a mound of stone 2 ft. base 1/2 ft high S of corner It's impracticable Land mountainous Soil 2 m ^t and 4 th rate Timber pines and quaking asp. Dense timber 56.70 chs. Mountainous land 80.00 chs.
Aug 12 th 1899	

North Boundary T 4 S. R 14 E.
Obs.

	<p>Running from a random line give spine for that purpose that that the corner of this line is N 89° 39' W, between the N E and NW corners of the township, therefore from the corner to T 4 S R 14 E R 3 1/4 + 1/2 E previously described is now N 89° 39' W between secs 1 + 36 Ascend</p>
5,50	Enter dense quaking asp and pine timber
4,000	No trace of old corner Set a sandstone 13 x 12 x 4 ins 8 ins in the ground for sec cor, marked $\frac{1}{4}$ on N face and raised a mound of stone 2 ft base $\frac{1}{2}$ ft high N of corner Pits impracticable from which A quaking asp tree 6 ins in diam bears S 11° 46' W 66.7 lbs dirt marked $\frac{1}{4}$ S 1 B.T.
44,53	No other trees within limits Top of small ridge bears N E and SW Descend.
65,21	Draw 10 lks wide drains N E
74,39	Ridge 8 lks wide bears N E, and SW 80 ft high
- 80,00	No trace of old corner Set a sandstone 24 x 9 x 5 ins 18 ins in the ground for cor of secs 1-2-35-436 marked with 1 notch on E and 5 notches on W edge and raised a mound of stone 2 ft base $\frac{1}{2}$ ft high W of corner Pits impracticable from which A pine tree 16 ins in diam bears S 35° 30' E 33.1 lbs dirt marked T 4 S R 14 E S 1 B.T.
	A quaking asp tree 10 ins in diam bears N 14° 50' W 8.5 lbs dirt marked T 4 S R 14 E S 35 B.T.
	No other trees within limits Land mountainous Soil 2 nd and 3 rd rate, Timber pines and quaking asp

North Boundary T14^NR14^E
secs.

Dense timber 94.50 chs.
Mountainous land 80.00 chs
Aug 13rd 1899

	W 89° 39' W between secs 2 & 35
14.91	Through dense timber
20.25	8 yards 18 ft wide - drains N.E.
29.22	Leave dense timber
37.78	Enter dense timber
40.00	Leave dense timber
	No trace of old corner
	Set a sandstone 15 x 7 x 5 ins 12 ins in the ground. for 1/4 sec cor marked 1/4 on N face and raised a mound of stone 2 ft base 1 1/2 ft high N of corner Pits impracticable
	No trees within limits.
43.58	Top of flat ridge bears N & S 380 ft high
	Enter dense timber
44.37	Sail bears N & S
75.76	Leave dense timber
	Begin gradual descent.
-80.00	No trace of old corner
	Set a sandstone 14 x 12 x 3 ins 9 ins in the ground. for cor of secs. 2, 3, 34 and 35 marked with 2 notches in E and 4 notches on W edges and raised a mound of stone 1 1/2 ft base 1 1/2 ft high SW of corner Pits impracticable
	No trees within limits
	Land mountainous
	Soil 2 nd and 4 th rate.
	Timber pine and quaking asp.
	Dense timber 60.99 chs.
	Mountainous land 80 chs.
	Aug 14 th 1899

W 89° 39' W between secs 3 & 34
Gradual descent along side of hill.

North Boundary T14S R14 E
Drs.

4,44	Enter dense quaking asp timber
35,45	Leave dense timber
40.00	No trace of old corner Set a sandstone 13 x 12 x 4 ins 9 ins in the ground for $\frac{1}{2}$ sec cor marked $\frac{1}{4}$ on N face and raised a mound of stone 2 ft base $\frac{1}{2}$ ft high $\frac{1}{4}$ of corner It is impracticable from which A quaking asp tree 8 ins in diam bears $339^{\circ} 20' W$ 36.1 lbs dist. marked $\frac{1}{4} S 34 B.T.$ No other trees within limits.
58.00	Began gradual ascent along side of hill Enter dense growth of timber
- 80.00	No trace of old corner. Set a sandstone 16 x 10 x 4 ins 11 ins in the ground. for cor of secs 3-4 - 33 & 34 marked with 3 notches on E and 3 notches on W edges. and raised a mound of stone 2 ft base $\frac{1}{2}$ ft high $\frac{1}{4}$ of corner It is impracticable from which A Balsam tree 10 ins in diam bears $569^{\circ} 20' W$ 28.5 lbs dist. marked T14S R14E S 4 B.T. A Balsam tree 16 ins in diam. bears $7741^{\circ} 05' W$ 37 lbs dist marked T13 S R14 E S 53 B.T. No other trees within limits. Land rolling Soil 2 nd and 3 rd grade. Timber quaking asp pine and Balsam Dense timber 152.98 chs. Mountainous land 80.00
4,51	$789^{\circ} 39' W$ between Lgs 4 and 33
14,46	Leave dense growth of timber Large mound of stone bears $732^{\circ} 40' W$ 7.32 chs.
14,53	Discord.

Aug 14th 1899

North Boundary T14 S R14 E

	Enter scattering timber Ascend. Ridge bears N & S. 180 ft high Descend. No trace of old corner.
18.41	Let a sandstone 14x7x6 ins 9 ins in the ground. For $\frac{1}{4}$ sec cor. marked $\frac{1}{4}$ on N. face and raised a mound of stone 2 ft base $1\frac{1}{2}$ ft high N of corner. Pits impracticable From which A pine tree 18 ins in diam bears. $535^{\circ}05'W$ 68.6 ft ^{ft} dist. marked $\frac{1}{4}$ S 47 E.
30.20	No other trees within limits
37.75	Cliffs 80 ft high.
37.90	Draw drains SW
40.00	Ascend.
45.43	Ridge bears SW and NE 200 ft high Descend.
47.68	Enter dense growth of small quaking asp.
50.00	No trace of old corner
62.21	Let a sandstone 19x14x7 ins 12 ins in the ground for cor. of secs. 4-5- 32 & 33 marked with 4 notches on E and 2 notches on W edges and raised a mound of stone 2 ft base 1/2 ft high N of corner. Pits impracticable
62.37	No trees within limits
66.75	Land mountainous.
80.00	Silt 2nd and 3 rate. Timber. pine and quaking asp. Dense growth of small quaking asp. 13, 25 chs. Mountainous land 8 ad chs.

Aug 15th 1899

16.39	789°39'W between secs. 5 & 32 Bottom of gulch 18 ft wide drains SW 750 ft deep.
30.98	Ridge bears. SW & NE. 120 ft high.
37.66	Ridge bears. SW & NE 90 ft high.

North Boundary T14 S R14 E
Blk.

40.00	No trace of old corner. Set a sand stone $18 \times 14 \times 5$ ins. 12 ins in the ground. for $\frac{1}{4}$ sec cor. marked $\frac{1}{4}$ on N face and raised a mound of stone 2 ft base $\frac{1}{2}$ ft high N of corner. Pits impracticable. No trees within limits.
73.21	Bottom of south fork of Whitmores Canon 2.8 miles wide and 450 ft deep. drains S.W.
74.68	Wagon road bears N.E. and S.W.
75.11	Center of creek 8 lbs wide with about 1 ins of water drains S.W.
76.02	Ascent bears. N.E. & S.W.
- 80.00	No trace of old corner. Set sand stone $26 \times 12 \times 5$ ins 18 ins in the ground. for cor to secos. 3-6-31 and 32. marked with 5 notches on E and 1 notch on W edges. and raised a mound of stone 2 ft base $\frac{1}{2}$ ft high west of corner. Pits impracticable. No trees within limits. Land mountainous Soil 2nd and 4th rate. Timber scattered aspens. Mountainous land 80.00 chgs.

Aug 16th 1899.

789°39' W	bitway secos. 6 and 31
	Crossed over rough country
28.47	Ridge bears N & S 180 ft high.
33.68	Descend.
40.00	No trace of old corner. Set sandstone $16 \times 9 \times 6$ ins 10 ins in the ground for $\frac{1}{4}$ sec cor. marked $\frac{1}{4}$ on N face and raised a mound of stone 2 ft base $\frac{1}{2}$ ft high N of corner. Pits impracticable. No trees within limits.
41.45	Some quaking asp timber begins bearing N & S.

North Boundary T14 S R14 E
Obs.

48.72	Gulch 18 lks wide drains S 200 ft dip. Leave dense quaking asp.
58.06	Enter scattering quaking asp.
63.96	Enter dense quaking asp. Limber bearing N 80°
72.46	Leave dense quaking asp.
72.63	Ridge bears. S E & N W 180 ft high. Described.
78.03	Corner of Tps 13 & 14 S Rs 13 & 14 E previously described. Land mountainous Soil 2 nd and 4 th rate. Timber, dense quaking asp, 13,17 obs Mountainous land 78.03. obs.
	Aug 17 th 1899

Boundaries of T14 S, R14 E

Latitude, departures and closing errors

Line designated	True bearing	Distance	Latitude		Departures	
			N	S	E	W
Wbdy T14 S R14 E	South	480.00		480.00		
Sbdy T14 S R14 E	S 89° 48' E	479.71		1.67	479.71	
Ebdy T14 S R14 E	North	480.00	480.00			
Nbdy T14 S R14 E	N 89° 39' W	478.03	2.92			478.02
Convergency						60
Totals			482.92	481.67	479.71	478.62
			481.67		478.62	
Error in lat			1.25	Error in dep. 1.09		

General description
For general description see notes of
subdivision of this township

Frank Anderson,
Willey H. Ware,
U.S. Dep. Surveyors.

North Boundary of Sec 8 R 11 E
Mo.

My power authorized to administer oaths
other than myself being available with
out great delay, inconvenience and expense
I administer the required preliminary
and final oaths,

Frank Anderson
U.S. Dep. Surveyor.

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FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Frank Anderson and Wiley H. Hale, United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of the East North and South Boundary of Township No. 14, Range No. 14, East of the Salt Lake Base Meridian showing the respective capacities in which they acted:

Clifton Draper, Chainman.
Eyraud Hippolyt, Chainman.
Pat Anderson, Moundman.
GEO. N. Hill, Moundman.
Scott Westfall, Axman.
Harmon Shander, Axman.
Milo Cephus, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Frank Anderson Wiley H. Hale, United States Deputy Surveyor, in surveying all those parts or portions of the East North and West Boundary of Township No. 14, South Range No. 14, East of the Salt Lake

Baseline meridian, in the state of Utah, which are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor General for Utah.

Clifton Draper, Chainman.
Eyraud Hippolyt, Chainman.
Pat Anderson, Moundman.
GEO. N. Hill, Moundman.
Scott Westfall, Axman.
Harmon Shander, Axman.
Milo Cephus, Flagman.

Subscribed and sworn to before me this 14
day of September, 1899 }



Frank Anderson,
U.S. Deputy Surveyor

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Frank Anderson, Wiley H. Ware, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from Jacob B. Blair, United States Surveyor General for The District of Utah, bearing date of the 30th day of September, 1898, I have well, faithfully, and truly, in my own proper persons and in strict conformity with the instructions furnished by the United States Surveyor General for The District of Utah, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of The East & West Boundaries of Twp 14 S R 14 E of the Salt Lake Base Meridian, Utah.

of the

meridian, in the State of Utah, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for The District of Utah and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey; and should any fraud be detected, I will suffer the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

Wiley H. Ware Frank Anderson

United States Deputy Surveyor.

Subscribed by said Frank Anderson, and sworn to before me,

this 18th day of December, 1898.



Jacob B. Blair
H. Surveyor General for Utah

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah May 5th 1900

The foregoing field notes of the survey of The West, East & North Boundaries of Township 14 South Range 14 East of the Salt Lake Base Meridian, Utah,

executed by Frank Anderson Wiley H. Ware, dated September 27, 1898, having been under his contract No. 226, dated September 27, 1898, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Jacob B. Blair

United States Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in _____, has been correctly copied from the original notes on file in this office.

United States Surveyor General.

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FIELD NOTES

X.S.B.

OF THE SURVEY OF THE

*Subdivision Lines**of**Township No. 14 South, Range No. 14 East**of the Salt Lake Base and Meridian,
in the State of Utah.*

AS SURVEYED BY

Frank Anderson and Wiley H. Ware, United States Deputy Surveyor,
Under ^{this} Contract No. 222, dated September 30, 1898
Survey commenced August 19th, 1899
Survey completed September 11th, 1899

Sister City 44-74-44 ✓

NAMES AND DUTIES OF ASSISTANTS.

Clifton Draper, Chairman

Eyrard Stipolyt, Chairman

Pat Anderson, Moundman

Geo. N. Hill, Moundman

Scott Westfall, Axeman

Harmon Skander Axeman

Milo Cuplin Flagman

BOOK A-256

INDEX DIAGRAM.

Township 14 South, Range 1st East.

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Meanders Page _____

PRELIMINARY OATHS OF ASSISTANTS.

WE, Clifton Draper

and Eugaud Hippolyt

do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of the subdivision lines of Township No. 14 South of Range No. 14 East of the Salt Lake Base and Meridian, in the State of Utah. Clifton Draper, Chainman.

Eugaud Hippolyt, Chainman.

Subscribed and sworn to before me this fifth }
day of July, 1899 }



WE, Pat Anderson

and Frank Anderson,

U.S. Deputy Surveyor.

do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of the subdivision lines of Township No. 14 South of Range No. 14 East of the Salt Lake Base and Meridian, in the State of Utah. Pat Anderson, Moundman.

William Tidwell, Moundman.

Subscribed and sworn to before me this fifth }
day of July, 1899 }



WE, Scott Westfall

and Geo. A. Hill

U.S. Deputy Surveyor.

do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey of the subdivision lines of Township No. 14 South of Range No. 14 East of the Salt Lake Base and Meridian, in the State of Utah. Scott Westfall, Axman.

Harmon Chander, Axman.

Subscribed and sworn to before me this fifth }
day of July, 1899 }



I, Milo Cuplin

and Frank Anderson

U.S. Deputy Surveyor.

do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of the subdivision lines of Township No. 14 South of Range No. 14 East of the Salt Lake Base and Meridian, in the State of Utah. Milo Cuplin, Flagman.

Subscribed and sworn to before me this fifth }
day of July, 1899 }



Frank Anderson

U.S. Deputy Surveyor.

Sub-division of T. 14 S. R. 14 E.

C. H. S.

Survey commenced Aug 19th 1899 with
a W & L. E. Gurley light mountain
transit, for description of which see
notes of subdivision of T. 13 S. R. 14 E
book C.

From the corner of sec. 1-2-35-36
on S. Bdy. of township which is a
sandstone set by one previously
described "I" run

$71^{\circ} 00' \text{ S. W.}$ between secs. 35 and 36
Over mountainous land.

Descend.

7.56 Gulch 4 lks wide drains N.E.
230 ft. deep.

9.94 Top of ridge bears S.W. + N.E.

10.89 Descend.

18.70 Ravine - drains S.E. 120 ft. deep.

38.09 Enter dense growth of quaking asp
and pine timber

40.00 Lift a sandstone 14 x 8 x 6 ins. 9 ins. in
the ground. for $\frac{1}{4}$ sec cor marked $\frac{1}{4}$ on
W face and raised a mound of
stone 2 ft base $\frac{1}{2}$ ft high W of corner
Pits impracticable From which
a. A red pine tree 8 ins in diam bears
 $71^{\circ} 58' 58'' \text{ E}$ 17.8 lks dist marked $\frac{1}{4}$ S 36735.
No other trees within limits

60.18 Corner is on point of ridge, descend
Bottom of draw drains S. S. 8° 50' E

Ascend.

64.33 Leave dense growth of timber

72.20 Enter dense growth of quaking asp.
and balsams.

73.33 Top of ridge bears S.E. + N.W. 200 ft high
Descend.

73.82 Lift a sandstone 12 x 8 x 6 ins. 8 ins. in
the ground. for cor of secs. 25-26-35 + 36
marked with 1 notch in E and 1 notch
on S. edges, and raised a mound
of stone 2 ft base $\frac{1}{2}$ ft high W of corner
Pits impracticable From which

Subdivision of T14S R 14 E

Obs.

A quaking asp tree 6 ins in diam.
bears S $80^{\circ} 16' E$ 22.73 lks. dist. marked
T14S R14E S $36^{\circ} 13' E$

A quaking asp tree 6 ins in diam.
bears N $64^{\circ} 06' W$ 28.9 lks. dist. marked
T14S R14E S $26^{\circ} 43' E$

No other trees within limits.

Land mountainous.

Timber quaking asp & pine and balsam
Dense timber. 34.04 lks.

Mountainous land 80.00 acs.

Aug. 19. At 18.9.9.

S $89^{\circ} 48' E$ on a Random line between
secs. 25 and 36.

40.00 Left temp. $\frac{1}{4}$ sec cor.

79.98 Intersect E. bdy of S $\frac{1}{2}$ 11 lks. S of
cor. of secs. 26-30-31 & 36; hitherto
described

Thence I. run N $89^{\circ} 53' W$ or a
true line bet secs 25 & 36

Enters dense grove of quaking asp timber
Descent.

Leave timber

17.67 Enter growth of dense quaking asp.

21.83 Cross trail bearing N + S.

22.04 Ridge Creek 5-lbs wide 4 ins deep.
with pure water. drains S

22.65 Ascend.

24.60 Leave timber.

28.84 Ridge bearing S E and NW.

28.98 Descent

37.15 Enter dense quaking asp on N edge
of ridge

39.99 Cut a sandstone 18x10x6 ins 12 ins.
in the ground. for $\frac{1}{4}$ ac. cor. marked

$\frac{1}{4}$ on place sand raised a mound
of stones 2 ft base $1\frac{1}{2}$ ft high. N of corner
gate impracticable from which

A quaking asp tree 8 ins in diam.

Subdivision of First PR 14 E

	bears. S 10° 50' E. 34 lbs. dist. marked S 36 T.
	No other trees within limits
52.60	Brown drainage S E.
- 79.98	The corner of secs. 25 26-30 & 36 Land mountainous. Soil 2nd & 3rd rate Shrub Quaking asp. and pine Dense timber 20,03 chs Mountainous land 79.98 chs.
	<u>Aug 19th 1899</u>

	N. 9° 01' W. bet secs 25 & 26 Through dense growth of quaking asp. Descent.
12.48	Draw drains. S.E.
14.98	Leave dense timber Enter scattering bush.
20.08	Ridge bears. S E + N W 200 ft high Enter dense growth of quaking asp.
20.38	Descent.
28.38	Draw drains S.E.
	Ascend.
36.32	Ridge bears S & W. 200 ft high.
40.00	Set a sandstone 24x14x7 ins 18 ins in the ground. For $\frac{1}{4}$ sec. cov. marked $\frac{1}{4}$ on W face and raised by ground of stone 2 ft base $\frac{1}{2}$ ft high at corner It is impracticable to know which a quaking asp tree 12 ins in diam. bears. S 17° 50' E. 27.4 lbs dist marked $\frac{1}{4}$ S 25 T.
	No other trees within limits
	A spring bears. S 68° 50' E 594 chs.
	Corner is on edge of ridge.
40.43	Descent.
65.59	Draw drains E
77.97	Ridge bears S & W 240 ft high
78.05	Descent
- 80.00	Set a sandstone 14x12x6 ins 10 ins

Subdivision T14 S. R 14 E

in the ground for cor. of sec. 23 & 24
254.26 marked 1 in. thick & 2 in. wide
on edges - and raised a mound of stone
2 ft base 1/2 ft high W of corner.
It's impracticable to run which

A Balsam tree is in line. bears
 $384^{\circ} 40' W$ 20.7 lbs. dist. marked
T 14 S. R 14 E 826 B.T.

A Balsam tree 8 ins. diam. bears
 $378^{\circ} 20' E$ 19.35 lbs. marked
T 14 S. R 14 E 824 B.T.
No other trees within limits
Soil sandy & gravelous.

Timber spruce & pine & balsam
Dense timber 66.60 acrs.
In mountainous land 80.00 acrs.

Aug. 20, 1899.

$889^{\circ} 53' E$ on a random line bet. sec. 24
and 25.

- 44.12 Set stn. 1/2 acre cor.
83.12 Estimated E by 1/2 of C.P. 9 lbs. M of cor.
at sec. 14-24. 7.5430. which is a round
Pebble set by me & left you described
There. I am $889^{\circ} 49' W$ on a tree
line bet. sec. 24 & 25 wgr. mountain
was laid along N side of ridge
Top of ridge looks $876^{\circ} 10' W$ & $877^{\circ} 10' E$
Dense dense pine timber.
West gent. curve N & S. runs at
this point $845^{\circ} W$.
22.02 Range creek 9 lbs wide 8 ins. dep.
ditch 3 flows at this point $845^{\circ} E$
Depth of Range creek Canon 300 ft.
layed.
30.60 Set of sandstone, 24x10x8 ins 19 ins
in the ground. for you can marked
in space and raised a mound of
stone 2 ft base 1/2 ft high W of corner

Subdivision T 4 S.R. 14^d

Obs.

	Pits impracticable from which a pine tree 12 ins in diam bears. W. 3.6 25° E 41.6 lbs dist. marked 14 S 24 B.T.
42.30	A pine tree 8 ins in diam bears 39° 20' E 11 lbs dist marked 14 S 25 B.T. Leave dense timber Enter scattered timber Gradual ascend.
52.30	Stiff ascent sloping N.W. over broken stone ground.
64.80	Descend.
80.02	Enter dense quaking asp timber On top of sec. 25 S 26 - 23 & 24 Land mountainous.
	Soil 2 nd and 4 th rate Timber quaking asp and pine Dense timber 48.84 chs. Mountainous land 8002 chs.
	Aug 20 th 1899.

	70° 0' W left sec 23 and 24 Descend. through dense growth of timber
7.86	Bottom of draw diam E.
14.87	Bottom of draw diam S E
22.33	Leave dense timber
	Enter scattering timber & brush.
40.00	Set a sandstone 14 x 8 x 4 ins. 10 ins in the ground. for 1/4 sec cor. marked 1/4 pt W face and raised a mound of stone 1 1/2 ft. base 1/2 ft high W of corner Pits impracticable
41.63	Ridge bears S + W 340 ft high.
	Enter dense timber
42.12	Descend.
80.00	Set a sandstone 15 x 8 x 6 ins 10 ins in the ground. for cor of sec. 13 - 14 23 & 24 marked with 3 notches on S and 1 notch on E edges and raised

Subdivision T14 S. R 14 E.
Secs.

a mound of stone 2 ft base $1\frac{1}{2}$ ft
high W of corner.

Pts impracticable from which

A fine tree 10 ins in diam bears
S 21° 50' E 33 lbs disk marked

T 14 S R 14 E S 24 B.T.

A fine tree 20 ins in diam. bears
S 9° 35' W 28 lbs disk marked

T 14 S R 14 E S 2 3 B.T.

A fine tree 12 ins in diam. bears
N 70° 40' W 32 lbs disk marked

T 14 S R 14 E S 12 B.T.

No other trees within limits

Land rough and mountainous

Soil 2 & $\frac{1}{2}$ feet rate.

Timber fine and quaking asp.

Dense timber 60.70 chs.

Mountainous land 80.00 chs. Aug 21 1899

S 89-49' E on a random line

bet. secs. 13 & 24

\$10.00 Sit. boulders $\frac{1}{2}$ sec 60.

\$79.98 Igneous & bdy of sp. 5-lbs. Sp.
of corner of secs. 13-18-19 & 24. which
is a sandstone schistose and
lumpy as described.

The line I. am N 89° 51' W on a
true line bet. secs. 13 & 24

Along south side of ridge bearing E & W
elevated.

19.36 Offs of ridge bears N E & S W

19.36 Discreet.

Enter dense growth of quaking asp.
and pine timber

39.99 Sit. sandstone 14 x 8 x 4 ins. gins.

in the ground. Lg. 4' sic cor. marked
 $\frac{1}{2}$ on N face and raised a
roughed off stone 2 ft. base $1\frac{1}{2}$ ft
high N of corner.

Pts impracticable from which

Subdivision 014 S. Riff.

	A quaking aspen for diary trees N. 20° 40' E. The dist marked 1/4 5 1/2 ft.
44.07	A Balsam tree 10 ins diary trees S. 15° W. 31 lbs. dist marked 1/4 5 24 ft.
	Bottom of ditch drained 65' w 200 ft. deep.
50.43	Center of Range Creek. 5 ft. wide 3 ins. deep. pure water drains. 3 2 1/2
51.67	Trail in Range Creek. Cannon trees 77 - 8
65.89	Spiral of Mountain trees 77 25 E. and S. 25 W.
- 79.98	The gr. of nos. 13-14-23 & 24. Dull rough and mountainous Soil. 2 m. on 4" rock. Timber pine and queening asp. Dense timber 60.44 lbs. Mountain trees land 79.95 lbs.

On account of the dense timber the
rough rugged, and precipitous
nature of the country which
is impracticable of surveying.
I discontinued running this line
any further to the north.

From the corner of nos. 2-3-34 &
35 on S. Ely of the Sp. which is a
sandstone set by me and previously
described.

I ran 39 0' 01' 01' but nos 34 &
35 passed through scattered
timber and over ledges.

9.82	Fir trees. N 48° 30' E. & 3 85' 20 lbs. 11 ft. 1/2
9.98	24 sec
	Enter dense timber
16.75	Trees draining. N 44° 11' E.
40.00	Set a sandstone 14 x 10 x 2 ins. 9 ins

Subdivision of S 1/4 S R 1/8

Block

		<p>in the ground, for 4 sec cor marked $34^{\circ} 00' E$ face and raised a mound of stone 2 ft. base $\frac{1}{2}$ ft high W. of corner.</p> <p>Plot impracticable from which A fine tree 7 ins diam bears. $S 64^{\circ} 30' E$ 8 lks dist marked $1\frac{1}{4}$ S 35 R 1/8 T.</p> <p>No other tree within limit.</p>
53.80		<p>Bottow of dry creek bed. of north fork of Devil's Hole canon. H. 5 lks wide drains. W. 1470 ft. elev. Ascend. over ledge.</p>
53.80		<p>Leave dense timber Enter scattered timber</p>
- 80.00		<p>Set by sandstone $37 \times 10 \times 8$ ins. 19 ins in the ground, for cor. of sec 26-27 $34^{\circ} 30'$ marked with notch on 3 and 2 notches on E edges, and raised a mound of stone 2 ft. base, $\frac{1}{2}$ ft high W. of cor.</p> <p>Plot impracticable from which A fine tree 30 ins in diam bears $34^{\circ} 40' 0'' E$ 18 lks dist marked S 14 R 1/8 E S 26 R 1/8 T.</p> <p>No other tree within limit.</p>
23.80		<p>Land mountainous and rocky Soil $3^{\circ} 1$ and $4^{\circ} 1$ - saly. Timber - pine and quaking asp. Dense timber 43.95 chs. Mountainous land 80.00 chs.</p> <p style="text-align: right;">Aug. 22nd 1894</p>

389-48' E on a random line.
 Lk. 24.5 sec. 26 & 35

26.42 To the margin of impassable cliff
 and descent. Secs. 7 & 8.
 To pass these obstructions we offset
 as follows:

$270^{\circ} 01' W$ 8 chs.

389-48' E 24.86 chs.

Subdivision of Ch. 14 S.R. 14th

Chs.

South $0^{\circ} 01'$ Egrt. 8 chs. to a
point on edge of cliffs.

51.28 Let sheep witness cor. for 1/2 ac. cor.
80.04 Ontrance 27 & 8 lim. elks. S of
cor. nos. 25-26 & 35-36.

There I run N 89° 52' W on a
true line between sec. 26 & 35
through dense growth of quaking
asps.

Entered.

19.19 Palms ridge bears N. S. Elevation
9000 ft. abov. sea level.

Descend over ledges and cliffs
Leave dense timber.

28.75 Enter scattered pine and cedar.
Let go sandstone 14 x 12 x 4 ins 6 ins
in the ground. Let witness cor. & 1/4
sec cor. marked W. 6. 3' on N face
rounded pyramid of stone 2 ft
are $\frac{1}{2}$ ft high N of corner
Pits impossible from which
A fine tree 6 ins in diam bears.
 $36^{\circ} E$ 26.4 lbs. dist. marked

W.C. // S 35. B.T.
40.02 4 1/4 ft. in face in upper cliff and out set.
53.58 Circled west. did get.

68.31 S. of ridge N.E.S.W.

68.50 Descend on uniform slope.

Cor. of sec. 26-27. S 47.83.

Land, mountainous.

Soil 3' and 4' on nata

Pine-fir cedar & quaking asp.
Dense timber 22, 33 chs.

Mountainous land 80. or 4 chs.

Aug 22nd 1899

N 0° 1' W between Secs 26 & 27

Entered through scattering timber
over cliffs and ledges.

Ridge bears E & W 500 ft high

descend.

12.22

12.43

Subdivision 1st S. R. 1st E.
Sec. 2

- Enter dense timber
Bottom of gulch 30 lbs wide drains
 $71^{\circ} 41' 20'' W$
- 40.00 Ascend. Leave dense timber
Set a sandstone 18x16x10 ins 12 ins
in the ground. for top see cor. marked
 $\frac{1}{4}$ on N.W. face and raised a mason
of stone 2 ft base $\frac{1}{2}$ ft high. W. of
corner
- Pits impracticable from which
A balance 6 ins. in diam. bears
 $351^{\circ} 10' W$. 17 lbs. marked $\frac{1}{4}, \frac{3}{4}, 27, 13, 5$.
No other trees within limits.
- 51.69 Ridge bearing $71^{\circ} 9' 20'' W + S 79^{\circ} 20' E$
200 ft high.
- 52.14 Descend and enter dense growth
of timber
- 59.21 Bottom of gulch 6 lbs wide drains
 $71^{\circ} 8' 10'' W$ 180 ft deep.
Ascend over cliffs.
Leave dense timber.
Enter scattering timber.
- 71.99 Ridge bearing $71^{\circ} 87' 40'' W + S 87^{\circ} 40' E$
170 ft high.
Enter heavy timber
- 76.34 Bottom of gulch 6 lbs wide drains
 $71^{\circ} 8' 30'' W$ 260 ft deep.
Ascend.
Enter scattered timber.
- 86.00 Set a sandstone 16x6x6 ins 12 ins
in the ground. for cor. see 22-23.
 $\frac{1}{4}$ & $\frac{3}{4}$ marked with $\frac{1}{2}$ notches on
the $\frac{1}{4}$ & $\frac{3}{4}$ notches on the edges. and
raised a mason of stone 2 ft base
 $\frac{1}{2}$ ft high. W. of corner.
Pits impracticable from which
A mahogany tree 7 inches dia. bears
 $346^{\circ} 46' E + 33^{\circ} W$. 35 lbs. side marked
 $1, 14, 8, R, 44, 8, S, 26, P, T$.
No other trees within limits.
R and mountainous.

Subdivision T14 S R 14 E

Soil 2nd & 4th rate.
 Timber pine, cedar and mahogany and
 Dense timber 37.66 acres.
 Mountainous land 80.80 acres.

Aug 23-1899

- 889.52' E in a random line
 bet secs 23 & 26
 Set tress $\frac{1}{4}$ sec cor.
 Enter sec 23 & 26 line 9 tress 77 of cor.
 of secs 23-24-25 & 26
 Hence I run 7189.48' W in a
 true line between secs 23 & 26 through
 dense growth of pine and quaking asp.
 over rough mountainous land
 ascend.
- 26.78 Tatmas ridge begins 1148. 9200 ft
 elevation above the sea.
- 36.03Leave dense timber
 Descend.
 Enter scattered pine and cedar
 39.98 Set up sand stone 14 x 6 x 5 ins 10 ins
 in the ground. for $\frac{1}{4}$ sec cor. marked
 $\frac{1}{4}$ of N face and raised a pyramid
 of stone 2 ft base $\frac{1}{2}$ ft high 77 of
 corner.
 Its impracticable from which.
- A pine tree 12 ins in diameter lies.
 368.60' E 65.8 ft high marked $\frac{1}{4}$ S 26 B T.
 No other trees within 100 ft.
- 1.23 Descend along side of hill.
- 79.86 On top of secs. 22, 23, 26 & 27
 Land mountainous
 Soil 2nd and 4th rate
 Timber pine & quaking asp cedar
 Dense timber 36.53 acres
 Mountainous land 79.96 acres.
- Aug 23-1899

Subdivision of T14 S R14 E

	No° 9110 - bit no's 22 & 23 Through dense growth of timber Ridge bears. E & W 110 ft high. Draw drains SW 90 ft deep.
1.26	
12.34	
	Acre or around
17.76	Draw drains SW. Leave dense growth of timber Elder scattered timber Over ledges.
40.00	Set a sandstone 24 x 14 x 6 ins 18 ins in the ground for cor of cor marked $\frac{1}{4}$ in W face $\frac{1}{4}$ and raised upground of stone 2 ft base $\frac{1}{2}$ ft high W of corner. This impracticable from which A red pine tree 11 ins in diam bore $348^{\circ}40'W$ 20 lbs. dist marked $T\ 14\ S\ R\ 14\ E\ S\ 15\ B.T.$ No other trees within limits.
41.57	Ridge bears $360^{\circ}W$ & $1160^{\circ}E$ 160 ft high
45.03	Draw, drains N.W. 120 ft deep
62.12	Top of ridge bears E. & W 250 ft high
62.29	Cross-track bears E & W
	Elder dense growth of timber
63.31	Descent.
76.59	Bottom of draw drains E
-80.00	Set a sandstone 20 x 12 x 4 ins. 15 ins in the ground, for cor of cor 14-15-22 & 23 marked with 3 notches on S and 2 notches on E edges. and raised upground of stone 2 ft base $\frac{1}{2}$ ft high W of corner. This impracticable from which A. pine tree 16 ins in diam bears $248^{\circ}W$ 57.5 lbs. dist. marked $T\ 14\ S\ R\ 14\ E\ S\ 15\ B.T.$ A pine tree 8 ins in diam bears $705^{\circ}50'E$ 51.5 lbs. dist marked $T\ 14\ S\ R\ 14\ E\ S\ 14\ B.T.$ A pine tree 12 ins in diam bears $341^{\circ}40'E$ 26.5 lbs. dist marked

Subdivision T14 S R 14 E

T14 S R 14 E S 23 B.T.

A pine tree 6' in diam. bears.
S 57° W 43.9 lbs dist. marked

T14 S R 14 E S 22 B.T.

Land mountainous.
Soil 2nd & 3rd rate.

Timber spruce cedar and
quaking asp.

Dead timber 29.47 chs

Mountainous land 80.00 chs.

Aug 24-1899

S 89° 48' E on a random line bot.

secs 14 & 23.

40.00 Set traps $\frac{1}{4}$ sec corner.

80.04 Intersect N 45 line 3 lbs 77
of cor of secs. 13 14-23 & 24.

Hence st. run N 89° 47' W on
true line between secs 14 & 23.
descend over rocky ground.

13.10 Draw drains C.

23.07 Draw drains N 36° 18' E

Enter dense growth of timber and
underbrush. Ascend

39.90 Draw drains N.

40.02 Set of sandstone 24x10x8 ins 18 ins
in the ground. for $\frac{1}{4}$ sec cor. marked
 $\frac{1}{4}$ pt N face and raised ground
of stone 2 ft face $\frac{1}{2}$ ft high of corner
Its impalpable from which.

A pine tree 16 ins in diam. bears.
N 19° 20' W 17.3 lbs dist. marked

$\frac{1}{4}$ S 14 B.T.

A pine tree 22 ins in diam. bears
S 55° 50' E 21.6 lbs. dist marked

$\frac{1}{4}$ S 2.3 B.T.

Draw drains N 31° 10' E

Dry gulch 4.5 lbs. wide at bottom
depth N 70° E

80.04 The cor of secs. 14-15-22-8 2.3

Subdivision of T 14 S R 14 E

Blk.

	<p>Land mountainous. Soil, 2nd & 3rd rate. Timber dense pine, and quaking asp. Dead timber 36.96 chs. Mountainous land, 80.04 chs. Aug 24th 1899,</p>
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On account of the dead timber the rough rugged and precipitating nature of the country, which is impracticable of surveying. I discontinued running this line any further to the west.

- | | |
|--|---|
| | <p>From the corner offices. S. of 33 & 34 on the S. bdy of the sp. which is a sandstone set by me. and hitherto described. It runs
71° 0' 02" W for 200 ft. 33 & 34 ft
Ascend through scattered timber
10.83 Ridge brdg. S 80° E and 7780° W
230 ft high.
11.60 Descend,
Enter dense underbrush
Leave dense underbrush.
Set up sandstone 24 x 14 x 5 ins. 10 ins
in the ground. for 1/4 acre marked
1/4 on W face and raise a mound
of stone 6 ft base 1/2 ft high. w/ corner
It is impracticable from which
A pine tree 14 ins in diam. bears
7774° 10' E 65 lbs. desk. marked
1/4 834 B.T.
No other tree within limit.
This corner is in bottom of cañon
42.12 Dry creek bed of south fork of Tidwell
Cañon 13.6 lbs. wide. diameter
549058° W 400 ft deep.
42.25 Ascend through scattered timber</p> |
|--|---|

Subdivision of T14 S R 14 E

Obs.

	and over ledges.
71.11	Ridge bears N 75° 20' E & S 75° 20' W 360 ft high.
72.17	Descend
8000	Enter dense timber Set a sandstone 24x18x6 ins 18 ins in the ground. for cor of secy 27-28-33 & 34 marked with a notch on S and 3 notches on the E side and raised a mound of stone 2 ft base 1/2 ft high W of corner Lots impracticable from which a fine tree 9 ins in diam bears. S 23° 42' W 9 lbs dist marked T14 S R14 E S 33 B.T.
	A fine tree 10 ins in diam bears N 24° W 22.7 lbs dist. marked T14 S R14 E S 28 B.T.
	A fine tree 6 ins in diam bears N 55° 35' E 17.3 lbs. dist marked T14 S R14 E S 27 B.T. No other trees within limits.
	Land mountainous Soil 3 1/2 & 4 ft. nat. Timber pine and quaking asp, Dense timber at. 7.83 lbs. Mountainous land 60.00 obs
	Aug 25-1899

	S 89° 48' E on a random line lot.
40.00	Secs. 27 & 34
49.98	Set. tump 1/4 Sec cor. Intersect N & S line 11. lbs S of cor. of secy. 26 & 27-34 & 35. Thence S. line 11.89.63 W. On line lot nos. 27 & 34
24.13	Ascend through scattered pine and cedars and over cliff Top of ridge bearing N 80° E & S 80° W 210 ft high.
24.87	Descend.

Subdivision of T11S, R11E
(262)

39,99	<p>Set a sandstone 30 x 18 x 6 ins. 22 ins. in the ground. for $\frac{1}{4}$ sec cor. marked. $\frac{1}{4}$ on N face and raised a mound of stone 2 ft bare $\frac{1}{2}$ ft high. $\frac{1}{4}$ of corner.</p> <p>Pits impracticable from which a pine tree 30 ins in diam bears S$61^{\circ}50' E$ 53 lbs dist. marked</p> <p>$\frac{1}{4} S 34^{\circ} 13' T$</p> <p>No other tree within limit.</p> <p>This $\frac{1}{4}$ cor. is located directly under a cliff. 32 ft. high, bearing E & W Ridge bears S W N E 200 ft high</p>	
62,74	Descent.	
63,64	Entered dense pine timber	
- 79,98	<p>The cor of secs. 27 + 28 - 33 + 34</p> <p>Land mountainous</p> <p>Soil $2\frac{1}{2}$ + $4\frac{1}{2}$ in. deep</p> <p>Timber pine quaking asp. & cedar</p> <p>Dense timber at 11.09 Chrs.</p> <p>Mountainous land 79.98 obs</p> <p>Aug 25th 1889</p>	
10,87	<p>No° 92 W ft secs 97 & 28.</p> <p>Through dense pine timber</p> <p>Leave dense pine timber</p> <p>Enter dense underbrush, and good grazing land</p>	
25,00	A bank of ridge. 5 char. E course S. E.	
40,00	<p>Set a sandstone, 18 x 12 x 6 ins. 12 ins. in the ground. for $\frac{1}{4}$ sec cor. marked $\frac{1}{4}$ on W face and raised a mound of stone 2 ft bare $\frac{1}{2}$ ft high. $\frac{1}{4}$ of corner</p> <p>Pits impracticable from which a pine tree 6 ins in diam bears S$22^{\circ} E$ 82,1 lbs. marked $\frac{1}{4} S 27^{\circ} 13' T$.</p> <p>A pine tree 8 ins in diam bears N$81^{\circ}50' W$ 96,1 lbs. dist marked $\frac{1}{4} S 28^{\circ} 13' T$</p> <p>Descent.</p>	

Subdivision of T14 S R 14 E

44.65	Gulch. drains. NW. 300 ft dep. and drains into main gulch. Leave dense underbrush.
76.08	Road bears SW & NE. Dry creek bed. drains S 30° W about 10 chs. then almost. w. In Pasture Canyon, about 380 ft dep.
76.47	Ascend.
80.00	Set a sandstone 20x12x10 in. 10 in in the ground for cor. of sec. 21-22 27 + 28 marked with 2 notches on S and 3 notches on E edges and raised a spring of stone 2 ft base 1/2 ft high W of corner. This impracticable land frontaneous Soil 1 1/2 - 3' later.
	Timber fine. cedar. Dense timber 10:87 also dense underbrush 33.18 also. Mountainous land 80.00 chs.
	Aug 26 1889

40.00	S 89 33' E on a random line between secs. 22 and 27
80.04	Set burs 1/4 sec cor. Intrigued N and S line 3 hrs. 3 of cor. of secs. 22-23 26+27 Plane 1. am 21 89° 54' W
	On true line between secs. 22+27 descend along top ridge
74.83	Bottom of Gulch 19 hrs wide, drains S 17° 30' W 700 ft. dep.
57.75	Ascend.
37.95	Ridge bears S 11° W & N 45° E, 300 ft. high.
40.02	Set a sandstone 18x10x6 in. 12 in in the ground. for 1/4 sec cor. marked 1/4 per ft. face and raised ground of stone 2 ft base 1 1/2 ft high. 27 of cor.

Subdivision S 1/4 S. R 1/4 E
Bks.

	Pits impracticable from which a cedar tree grows in drain basin. $738^{\circ} 10' W$ 20 lks dist. marked $1/4 S 23 B.T.$ No other trees within limits
63,53	Descend on high cliff 17.5 ft. high
73,71	Bottom of dry creek bed of pasture canon 15 lks wide drains $3.18^{\circ} 30' W$ 30 ft dep.
- 80.04	Thru cor of secs. 21 & 22 - 27928 Land mountainous - cliffs Soil 3 1/2" and 4" rat. Timber fine cedar & mahogany. Mountainous land 80. off lbs.
	Aug 26-1899
	No $^{\circ} 02' W$ between secs. 21 & 22 Through scattered pine & cedar timber. and over good grazing land.
33,53	Top of ridge basin E & S W 380 ft high
35.05	Enter dense pine and quaking asp timber
35.87	Descent.
40.00	Lia sandstone 18 x 12 x 6 ins. 10 ins in the ground. for $1/4$ sec cor. marked $1/4$ gr. W face and raised a mound of stone 2 ft base $1/2$ ft high W of cor.
	Pits impracticable from which a pine tree 10 ins. in drain basin. $345^{\circ} 40' W$ 43 1/2 lks, dist. marked $1/4 S. 21 B.T.$
	A pine tree 16 ins in drain basin. $350^{\circ} 50' E$ 22 1/2 lks dist. marked $1/4 S 22 B.T.$
57.25	Draw drains N.W. Leave dense timber and grazing land
61.30	Enter dense pine timber descend

Subdivision of T14 S R14 E
Class

65.80	dry creek bed of Poli canon 7.5 lbs wide drains S 71° 10' W 280 ft deep.
65.87	Ascend.
- 80.00	Set a sandstone 24 x 12 x 6 ins. 18 ins in the ground. for exp. of sec 15-16-21-422 marked with 3 patches on E and S edges. and with T14 S on N, E, & S R14 E on S E faces. and a rigid compound of stone 8 ft base 2 ft high W of corner.
	Pits impracticable from which A pine tree 30 ins in diam bears S 67° 01' E 127, 1 lbs dark, marked T14 S R14 E 822 P37, No other trees within limits
	Land mountainous. Soil 2 & 3 rate. Timber pine and cedar. Dense timber at 40. 80 chs. Mountainous land 80.00 chs.
	Aug. 27 - 1899

Aug 27-1899 at gh 56 m left I
observe Polaris and mark its
direction by a tack 4.5 cha to the
north

Astrom l. m. of obs. $\frac{1}{2}$ 56.5
A. C Polaris仰角. 15 43.1
Red A Aug 26 $\frac{43.1}{15.00}$
A. C. Polaris Aug 26 15.00
Hour angle of Polaris at obs. 18 - 56.5
 $\frac{23 - 56.1}{4 - 59.6}$

Time agreement. 4 - 59.6
Azimuth of Polaris at obs. 1' 32' 8
Later I turn left 1' 34" and
reverse and find that the vertical
wire covers a flag pole left in line
to the south, which 7 & 8 pine
I deem satisfactorily established,
Variation $16^{\circ} 10' E$.

Subdivision of T 14 S. R 17 E
6 hrs.

		S 89° 05' E. on a random line between secs 15 & 22
40.00		Set a trap 1/4 sec dist.
79.96		Intersection N + S line 5 links south of cor. of secs. 14 - 15 - 22 & 23 Enter I. rgn N 89° 56' W on true line between secs 15 & 22 through dense growth of timber. Ascend.
9.09		Patinas Ridge bears. N + S. E., at an elevation of about 9000 ft. above sea level.
10.13		Descend,
22.09		Draw drains N 20' W Ascend
32.55		Ridge bears N 60 W & S 60 E, dense timber on N side Trail to Palmas is best with south cliff 30 lbs. high bears N + S.
35.46		Trail to Palmas bears S. E.
38.13		Trail to Palmas bears S. E.
39.98		Set a random line 24 x 12 x 6 in. 18 in. in the ground. for 1/4 sec cor. marked 1/4 of 1/4 face sand raised a mound of stone 2 ft base 1/2 ft high N of corner.
		Pits impracticable from which a pine 30 in. in diam. bears. S 70° 10' W 49.2 lbs dist. marked 1/4 S 22 1/2 T.
56.94		No other trees within limit Descend over ledges.
63.96		Draw drains S W. Leave dense timber
		Enter scattered mahogany and pine timber
77.27		Draw drains & into pole canon over bar and grazing land.
- 79.96		The cor of sec 15 - 16 - 21 + 22. Land imperturbous. Soil 2 nd + 4 th rate. Timber pine cedar & quaking asp

Subdivision of T14 S. R. 14 E
Chs.

& Mahogany.

Large timber at. 63.96 chs.

Mountainous land 79.96 chs,

Aug 27, 1899

On account of the dense timber
the rough, rugged and precipitous
nature of the country which is
unpracticable of destroying.

I discontinued surveying this
line any further to the north.

From the cor. of sec. 4, 5, 32
& 33 on the S. bdy. of the Sp. which
is a sandstone set by me and
henceforth described.

I run $70^{\circ} 03' W$ between
secs. 32 & 33 through scattered
pines and cedars.

81.18 Ascend over ledges bearing E & W
27.02 Ridge bears. $8^{\circ} W$ & 71.8° , 302 ft high.
36.05 Small grassy mesa bears $75^{\circ} E$
& $71.4^{\circ} W$.

40.00 Set a sandstone 20x14x12 ins.
15. ins in the ground. for $\frac{1}{4}$ sec cor.
marked $\frac{1}{4}$ on NW face and raised
a mound of stone 2 ft base $\frac{1}{2}$ ft
high W. of corner.

This impracticable. From which

A pine tree 10 ins in diam. bears.

$845^{\circ} 20' W$ 51.1 chs, dish marked
 $\frac{1}{4}, \frac{1}{2}, 3, 2, 13.9$

A pine tree 12 ins, in diam. bears
 $744^{\circ} 25' W$ 62.4 chs, dish marked $\frac{1}{4}, 3, 33, 13.9$

45.63 Ridge bears. $71.54^{\circ} W$ & $85.4^{\circ} E$

Ascended through scattering under
brushy and cedarizing land.

65.44 Gulch drifts $29^{\circ} 70' W$

Ascended through scattering cedar,

Subdivision of T. 4 S. R. 14 E.
Chas.

	and pines.
79,01	Top of ridge bears S & W Leave a falling timber.
-80,00	Set a sandstone 24x24x6 in. 18 in. in the ground. In cor. of sec. 28-29 32 & 33 marked with 4 notches on E and 1 notch on S edge and raised a mound of stone 2 ft base 1/2 ft high W of corner. It is impracticable. and impracticable. Soil 2 $\frac{1}{2}$ x 3 $\frac{1}{2}$ ' rate. Timber pine and cedar, Mountainous land 8000 ft
	Aug 28-1899

	889° 48' E on a random line bet. secs. 28 and 33
40,00	Set a line $\frac{1}{4}$ sec. cor.
79,94	Opposite N & S. line 3 lbs small of copper. of secs. 27-28-33 & 34 Hence L. L. line N 89° 49' W on true line between secs. 28 & 33
19,76	Leave dense growth of timber descend.
35,50	Gulch drains N 6° 20' W 100 ft deep.
	Ascend.
39,97	Set a sandstone 24x12x6 in. 18 in in the ground. In $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ in N face and raised a mound of stone 2 ft base 1/2 ft high N of cor. It is impracticable to ascend.
	Enter dense underbrush
45,01	Ridge bears S 75° 20' E & N 75° 20' W. 150 ft high Leave down under brush Along side of ridge

Subdivision of T44 S R14 E

Bks

70.00	Ridge bears NE & SW Sloped along ridge Enter dense growth of underbrush The cor of secs. 28-29-32 & 33, Land mountainous. Soil 2 + 3 not rate. Timber pine and cedar. Dense underbrush 9.46 chs. Dense timber 19.76 chs. Mountainous land 79.94 acres.
	Aug 28 1899

70.00	70° 03' W bet secs 28 & 29 grazing land and underbrush. Bottom of draw drains N.W. Bottom of Pasture canon drains W - 380 ft. deep, bare dense underbrush dry creek bed 6 lks wide 6 lks. deep drains, W. around. ledges, bears E & W. overcliffs, bears. E & W 75 lks high. Beds sandstone 14x12x6 in 9 in in the ground. for $\frac{1}{4}$ sec cor. Marked. $\frac{1}{4}$ on W face and raised on a yard of stone 2 ft base $\frac{1}{2}$ ft high W of corner. Pits impracticable from which A pine tree 24 in in diam bears. N 38° 30' E 62 lks drift marked $\frac{1}{4}$ S 28 B T. A pine 14 in in diam bears. N 22° 40' W 31 lks drift marked 1/4 S 29 B T. Draw drains S 76° W heads. 6.06 chs above. Ridge bears. NE & SW End of flat ridge bears E & W good grazing land. and scattered outcrops
3,94	
16,52	
19,54	
19,60	
26,22	
27,01	
40.00	
53,69	
58,99	
62,64	

Syst division of T. 14 S. R. 14 E.
Lons.

		Descent.
-	80.00	Set of sandstone $24 \times 12 \times 6$ ins 1.8 mrs in the ground for cor of sec. 20-21 $28^{\circ} 47' E$ marked with 4 notches on E and 2 notches on S edges and raised a compound of stone 2 ft base $\frac{1}{2}$ ft high W of cor. This impracticable from which A red pine 9 ins in diam. bears. $821^{\circ} 05' E$ 41.8 lbs. dist marked T 14 S R 14 E S 28 B T.
		A red pine 10 ins diam. bears. $777^{\circ} 40' E$ 72.3 lbs dist marked. T 14 S R 14 E. S 21 B T.
		A fine tree 14 ins diam. bears. $858^{\circ} 10' W$ 54.5 lbs. dist marked T 14 S R 14 E S 29 B T, No other tree within limit.
		Land mountainous Soil $2^{\frac{1}{2}} \times 3^{\frac{1}{2}}$ in ab. Timber pine mahogany and cedar, Dense underbrush. 16.52 chs Mountainous land 80.00 chs. Aug 29. 1849
		$S 89-49'E$ in a random line between sec. 21 & 28
40.00		Set temp $\frac{1}{4}$ sec 005.
80.03		Intersection $77^{\circ} 45' E$ line 5 lbs south of cor of app $5^{\circ} 22-27^{\circ} 42'$
		Flume I. nrs. 7189051 W on true line between sec. 21 & 28
26.67		Ridge bears. $7741-58^{\circ} E$ & $8241-58^{\circ} W$ 300 ft high
29.89		Descent. Enter dense timber
40.01		Set 195 sandstone $18 \times 10 \times 4$ ins 12 ins in the ground. for $\frac{1}{4}$ sec cor. marked $\frac{1}{4}$ gr face and raised a compound of stone 2 ft base $\frac{1}{2}$ ft high P of corner This impracticable from which A fine tree 9 ins in diam. bears. $738^{\circ} 20' W$ 30 lbs. dist marked $\frac{1}{4}$ S 21 B T.

Subdivision of T14 S R14 E	
51.82	Leave dense timber Enter scattering timber Descend over bluffs. Bear N 10° S E
78.86	Draw begins N 31° W
80.03	So cos of sec. 20 - 21 - 28 - 24. Land mountainous Soil good 3rd rate. Timber pine, cedar, & quaking asp. Dense timber at 2193 Mountainous land at 8800 ft elev. Aug. 29 1891.

81.2	N 0° 03' W bet sec. 20 & 21 Bottom of Pole canon, draws S 45° W 380 ft deep.
81.27	Watson road begins S W & N E.
8.98	Spry creek bed of Pole canon. Drains S. W.
9.30	Cross road.
18.21	No cliffs bear E & W.
37.12	Ridge 60 ft high - bears E & N
40.00	Slate sandstone 24 x 2 x 4 in. 18 in. up the ground for 6 sec. con. marked 1/4 in. W face and raised around & stone 2 ft base 1/2 ft high. 60 ft corner. Limestone impracticable. Floor irregular. A cedar tree 24 in. in diam. bears.
	S 29° 25' W 24.9 ft high marked 1/4 820 137
	No other tree within limits
48.62	Over cliff. bears N E. & S W
30.39	Top of ridge bears N E. & S W 520 ft high
51.56	Enter dead pine and scattered timber - a grazing land. Descend.
73.51	Enter scattered underbrush.
80.00	Slate sandstone 3.0 x 24 x 6 in. 27 in. in the ground. for cor. 2 secs. - 16 1/2 - 20 & 21 marked 1/4 3 matches on S end of stone in E 1/4

Subdivision of T14 S R14 E

(cont)

and found a mound of stone
2 ft base $\frac{1}{2}$ ft high W. of corner.
It's impracticable. To roll which
A pine tree 6 ins in diam base.
352° 30' E 96 lbs dirt marked
T14 S R14 E S 21 B.T.
In other trees within limits
Land mountainous
Soil 2 $\frac{1}{2}$ to 3 $\frac{1}{2}$ moh.
Timber pine & cedar.
Mountainous land \$0.00 chs
Aug 29 - 1889.

- | | |
|---------------------|--|
| | S 89° 51' E on a random line between
secs. 16 & 21. |
| \$0.00 | Set tump $\frac{1}{4}$ sec. cor. |
| 79.95 | Entered N & S line 5 lbs. N of cor
of secs. 15-16-21- & 22
Then from N 89° 49' Ma true line between
secs. 16 & 21, over rolling ground
through scattered small pine and
and mahogany. |
| | Around |
| 30.98 | Ridge bears E & W 200 ft high
cliffs 16 ft. high.
Along ridge |
| 39.97 $\frac{1}{2}$ | Top of ridge between Pole and Bear
Caveous bears, S W & N E. 300 ft high.
Set a sandstone 24x16x12 ins 18 lbs
in the ground, for $\frac{1}{4}$ sec cor. marked
$\frac{1}{4}$ on N face and raised on
mound of stone. 2 ft base $\frac{1}{2}$ ft
high, N of corner.
This impracticable |
| 40.75 | Discard on ridge |
| | Enter dense quaking asp timber |
| 41.36 | Ledge 40 ft high bears. N E & S W |
| 53.93 | Leave dense quaking asp timber |
| 58.46 | Enter grove of pine and quaking asp
timber. |

Subdivision of T14 S R14 E
Sec.

61.22	Spurs running E & W
72.68	Top of large draw
75.97	Gulch drains N.W. Leave give of pine and quaking aspen timber.
- 79.95	Top of sec. 16-17-20 & 21 land mountainous Soil 2nd & 4th nati. Timber pine - quaking asp - and mahogany. Dense timber at 30.69 chrs. Mountainous land 79.95 chrs.
	Aug. 30-1899

	7000' W between secs. 16 & 17
2.63	Draw drains N.W.
12.88.	Road in Bear Canyon bears N.E. & S.W.
13.41.	Dry creek bed 4 lbs with drain S.W. Bear Canyon 490 ft. deep.
15.15	Crossed through small pine - and cedar timber - scattered
21.84	Cliffs bear N.E. & S.W.
40.00	Lit sandstone 24 x 18 x 6 ins. 18 ins in the ground. for $\frac{1}{4}$ sec cor. marked $\frac{1}{4}$ in all far and raised ground of stone 2 ft base $1\frac{1}{2}$ ft high $\frac{1}{2}$ of corner It is impracticable to mark which.
	A cedar tree 16 ins in diam. bears S. 65° 10' W 82.7 lbs dest. marked $\frac{1}{4}$ in S 17 B, T,
	No other trees within limits
46.36	Along grassy ridge bears N.E. & S.W.
47.88	Early dense growth of quaking asp. timber.
59.60	Leave dense quaking asp timber
62.48	Earlier dense growth of quaking asp
65.51	Leave dense growth of quaking asp timber.
76.51	Dry creek bed of Water Canyon 6 lbs waste. drains S. 30° W

Subdivision of T14 S. R14 E.
Elev.

	Water canon 400 ft deep. Wagon road leads S. 97 E. N.E. Climbed.
- 81.00	Marked tops of large rock standing on ledge of rock 35 ft high, size of rock 6 ft. high 14 ft wide & 4 w and 10 ft N & S. marked with a X (cross) and 8 on NW - 9 on NE - 16 on S E - 17 on SW with 4 crosses on S & E of cross Pile impracticable, and inconvenient to raise mound of stone Land mountainous.
-	Soil 2 nd to 4 th rate, Timber Quaking asp. pine Dense timber but 14.75 chs. Mountainous land 80.00 chs.
	Aug 30 th 1894

On account of the rough, rugged
and precipitous nature of the
country which is impracticable
of surveying & discontinuous
running this line to the north
and east.

From the cor of nos. 5 6 3 1 & 3 2 on
the S. bdy. of the Sp. which is a
sandstone but by me and hitherto
described it runs N 0° 03' W
posterior nos. 3 1 & 3 2.

Climbed through scattered pines
and cedars.

Top of cliff facing S E and N.W.
descend.

7.11	
7.29	
36.02	Gulch drains S 23° 25' E. 250 ft deep from point East 3.79 chs. mouth of stream coal prospect
37.12	
40.00	of powder 2 x 3 ft x 16 ins out of the ground for 1/4 mil. cor. marked

Subdivision of T14 S. R14 E
Obs.

	Up on W face, and raised ground of stone 2 ft base $\frac{1}{2}$ ft high W of cor.
56.82	Pits impracticable Top of cliff - bear E + W
71.96	Descend.
72.96	Draw drains W. Ascend.
- 80.00	Straight sandstone 24 x 24 x 24 ins 18 ins. in the ground. On cor. of secs. 29 30 - 31 + 32. marked with 5 matches on E and 1 match on S edges and raised a ground of stone 2 ft base $\frac{1}{2}$ ft high W of cor. Pits impracticable From which A pine tree in draw bears 7145° 15' W 2 lbs rock marked T14 S R14 E S 30 B.T. A pine tree 12 ins. in diam. bears S 74° E 4 lbs rock marked T14 S R14 E S 32 B.T. No other trees within limits. Land mountainous. Soil 2 + 3 $\frac{1}{2}$ ins.
	Timber pine and cedar. Mountainous land 8000 ft.
	Aug 31 st 1899.

	S 89° 48' E on a random line between secs. 29 and 32
40.00	Set line 1/2 sec cor.
50.07	Intersect N 77° 48' line of clss. S of cor. secs 28 - 29 - 32 - 33
	Thence we run N 89° 52' W on true line between secs 29 + 32
	Descend through dense growth of underbrush
	Along top of ridge
17.49	Cliffs and ledges begin. bear. N 80°. Leave dense underbrush.
29.43	Bottom of Whitmore Canyon drains S 200 ft deep.

Subdivision of T. 4 S R. 1st E.
Colo.

	Level.
31.80	Wagon road. bears $N 3^{\circ} E$ and $S 3^{\circ} W$
35.47	Whitewater creek 10 lbs wide drains $87^{\circ} W$
36.08	Ascend over cliffs bear... $N 8^{\circ} + S 8^{\circ} W$ Enter scattering pine and cedar timber
40.03	Set a sandstone $36 \times 24 \times 10$ ins 27 ins in the ground for $\frac{1}{4}$ acre cor marked $\frac{1}{4}$ cor W face and raised by round stones 2 ft high $\frac{1}{2}$ ft high N of cor. This will be practicable. From which A pine tree 13 ins in diameter. $S 1^{\circ} E$ 8 lbs dist marked $\frac{1}{4} S 3^{\circ} 2 B T$ No other tree within 6 ins.
70.17	Ridge bears. $N 17^{\circ} 30' W$ and $S 17^{\circ} 30' E$ 39 ft high
70.36	Descend from cliffs bearing $N W + S E$.
80.07	The cor of sec. 29-30-B1-4 32. Land irregular, cliffs, boulders Soil 3^{\prime} and 4^{\prime} or more. Timber pine and cedar. Broom-herb bush 17.49 acres. Irregular land 80.07 acres. Aug 31 1899

	$N 89^{\circ} 48' W$ on a random line between secs. 30 & 31
40.00	Set fence $\frac{1}{4}$ acre cor.
79.43	Intersection of W bdy of $T p.$ 3 lbs $\frac{1}{2}$ of cor. of secs. 25-30-31 & 36 Hence I run $S 89^{\circ} 49' E$
6.04	On true line between secs 30 & 31 Gulch drains $S 41^{\circ} 50' W$ 301 ft dip.
	Ascend through scattered timber Cliffs bear. $S W$ & $N E$.
39.43	Set a sandstone $20 \times 14 \times 5$ ins 15 ins in the ground for $\frac{1}{4}$ acre cor, marked

Subdivision of T 14 S R 14 E

1/4 S 30, B. T.

No other trees within limits

45.41 Ridge bears $76^{\circ} 20' E$ and $86^{\circ} 20' W$ 41 ft high.

45.71 Discend. through scattered timber

71.95 Bottom of gulch drains $810^{\circ} 45' E$
350 ft deep.

- 79.43 The cor of sec. 29-30-31 & 32

Land by mountainous.

Soil $2\frac{1}{2}$ and $4\frac{1}{2}$ rate.

Timber pine and cedar.

Mountainous land 74, 43 elev.

Aug 31 1894

W 1/2 S 30 by way sec. 29 & 30.

Arcund through scattered pine and
over ledges, bear NW & SE,

15.38 Ridge bears, NW and SE.

10.61 Discend.

40.00 Lg sandstone 24 x 10 x 8 ins 18 in

in the ground. for 1/4 sec cor. marked
 $\frac{1}{4}$ on W face and raised amount
of stone 1/2 ft face $\frac{1}{2}$ ft high. W of
corner.

This impracticable

41.26 Draw drains NW,

52.30 Draw drains. $848^{\circ} 50' E$ 8 ft wide.

56.66 Draw drains W

54.69 Ridge bears E and W 370 ft high.

Entire scattered cedar pine, and
Mahogany.

76.07 Discend.

- 80.00 Lg sandstone 20 x 8 x 6 ins, 22 in

in the ground. for cor of sec. 19-20
29 & 30. marked with 2 notches

on S and 5 notches on E edges. and
raise a mound of stone 2 ft face
 $\frac{1}{2}$ ft high. W of cor

This impracticable

Land by mountainous.

Soil $2\frac{1}{2}$ and $4\frac{1}{2}$ rate.

Subdivision of T14S R14E
Blrs.

	<p>Timber from mahogany and cedar. Mountainous land 80,000 acres. Sept. 22 1899</p>
	<p>S89°52' E, in a random line between secs. 20 & 29.</p>
40.00	<p>Set a turf $\frac{1}{4}$ sec'd.</p>
80.06	<p>Intersect N & S line 3 lbs. N off cor & sec'y 20 - 21 - 28 & 29 Hence I run N89°51' W on true line between secs. 20 & 29. Scoured through scattered timber and underbrush.</p>
31.72	<p>Bottom of Old River drains SW 378 ft deep. Level.</p>
8.29	<p>Wagon road bears. N E. and S W</p>
9.39	<p>A dry creek bed. drains. S 47°40' W</p>
9.66	<p>Scoured over cliffs.</p>
19.36	<p>Ridge of cliffs bears S 51° W & N 51° E 120 ft.</p>
25.50	<p>Bottom of Whitmore's Canon. drains S. 36° off. Level.</p>
30.80	<p>Wagon road bears. N E & S W</p>
33.38	<p>Whitmore's creek. so known. 2 mds deep. course S W</p>
40.03	<p>Set a sand stone 25x20x18 ins 18 ins in the ground for $\frac{1}{4}$ sec'd. marked $\frac{1}{4}$ on face and raised around of about 2 ft base $1\frac{1}{2}$ ft high N & corner.</p>
	<p>Pits impracticable</p>
40.53	<p>Scoured. and enter scattering brush.</p>
67.19	<p>Bench</p>
72.88	<p>Scoured.</p>
- 80.06	<p>Friction of sec'y 19-20-29 & 30. Land mountainous</p>

Subdivision of T. 4 S. R. 14 E.

Sec 2nd and 4th rate.
Timber small pine & cedar.
Miscellaneous land 80.06 acres.

Sept 3rd 1899

- 40.80 N 89° 49' W in a random line between
secs 19 & 30
Set traps $\frac{1}{4}$ sec cor.
Intersect N. bdy of Tp. 5 lots
S of cor. of sec. 19-24-25 & 30
There I run N 89° 47' E
by trap line between secs. 19 & 30
through scattering timber and
rock cliff, elevs. N & S.
39.15 Set a sawdust 18 x 12 x 7 ins 12
ins in the ground for $\frac{1}{4}$ sec cor.
marked. $\frac{1}{4}$ m. N. face and raised
a mound of stone 2 ft base $1\frac{1}{2}$ ft
high N of corner.
This impracticable from which
a pine tree grows in dead leafs.
N 40° E 32 lbs dirt, marked in
sec 19 Tp. 9.
No other trees within limits
Eggers Mesa leafs. N & S.
Leave traps.
Descend through small scattered
timber and underbrush.
To cor. of secs. 19 & 20-29 & 30.
Land miscellaneous.
Soil 2nd and 3rd rate.
Timber pine and cedar.
Mountain tea land 79, 150 chs.
Sept. 3rd 1899

N 0° 3' W between secs. 19 & 20
through scattered quaking grass &
pine timber

30.83 Descend over rocky ground on back

Subdivision of T. 4 S. R. 4 E.

Obs:

	and scattered underbrush
40.00	Set a sandstone 18 x 10 x 6 ins 12 ins in the ground. for $\frac{1}{4}$ sec cor. marked $\frac{1}{4}$ on W face and raised a mound of stone 2 ft base $1\frac{1}{2}$ ft high N of corner
	It's impracticable
37.96	Draw drains S E.
70.49	Draw drains E
- 80.00	Set a sandstone 32 x 10 x 5 ins 24 ins in the ground. for cor of secs 17-18-19 20 marked with 3 notches on S and 5 notches on E edges, and raised a mound of stone 3 ft base $1\frac{1}{2}$ ft high W of cor.
	It's impracticable
	Land mountainous - rocky Soil 3-4 & 4 th rate. Juniper small pine and scattering underbrush.
	Mountainous land go so she.
	Seph 30 1899.

	389°51' E on a random line between secs. 17 & 20
40.00	Set traps. $\frac{1}{4}$ sec cor.
80.06	Intersect 7 & 8 S. line 3 lbs N of cor. of secs. 16-17-20 & 21 10 fence c. 9 mrs. 289°50' E on true line between secs. 17 & 20
13.63	Bottley of bear cañon drains S. W. 4 ft. off traps. Level
16.54	Wagon road bears S 42° W and 242° E
17.75	Creek bed 7.5 lbs wide drains 339°20' W
19.87	Crossed through scattering timber
40.03	Set a sandstone 20 x 18 x 14 ins. 15 ins in the ground. for $\frac{1}{4}$ sec cor. marked $\frac{1}{4}$ on W face and raised a mound of stone 2 ft base $1\frac{1}{2}$ ft high N of corner

Subdivision of T14 S R14 E

6 hrs.

	Fits impracticable from which A cedar tree 14 ins in diam. bears. $N 13^{\circ} 30' W$ 52 lks dist. marked $\frac{1}{4} 817 739$.
44.78	In other trees within limits Ridge bears. $N 90^{\circ} 30' E$ and $S 90^{\circ} 30' W$ 150 ft high Ascend.
61.26	Bottom of Whitmire canon drains S.E. 200 ft deep. Level.
66.25	Wagon road. bears. $N 22^{\circ} 30' W$ about $S 22^{\circ} 30' E$
72.91	Whitmire creek 9 lks wide. 2 ins deep. drains. $S 24^{\circ} 30' E$
75.14	Ascend over stony ground.
- 80.06	Thick cor. of mes. 17-18-19 & 20. Land mountainous. Soil 2" and 4" rate. Timber small pine and cedar. Mountainous land 80.06 aha
	Sept. 4th 1899,

	$N 89^{\circ} 47' W$ in a random line between nos. 18 & 19.
40.05	Set a temp $\frac{1}{4}$ on cor.
78.87	Intersect W bdy of Sp. 7 lks with 8 lks cor. of nos. 18-19 & 24. Hence, I run $S 89^{\circ} 50' E$ in a true line between nos 18 & 19.
5.83	Ascend through dense growth of timber Top of mesa bears N & S. At an elevation of about 7500 ft above sea level, Leave dense timber Leave mesa.
19.38	Descend
23.45	Enter dense brush and quaking asp.
35.54	Cliffs and ledges, bear $N 45^{\circ} S$
38.87	Set a sand stone 2 & \times 10 \times 8 ins. 2 lbs.

Subdivision of T. 4 S., R. 4 E.
Sec.

	in the ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ in. N. face and raised a mound of stone 2 ft base $\frac{1}{2}$ ft high N of cor. It is impracticable
49.63	Draw drains N.
57.34	Ascend through heavy brush and quaking asph.
61.11	Draw drains N.
67.90	Ridge bears. N & S. Leave desert brush and quaking asph.
78.87	To top of secs. 17-18-19 & 20 and mountainous. Soil $2\frac{1}{2}$ & 3 rd rate, Timber pine and quaking asph. Leave underbrush and timber at 50-28 chrs. Mountainous land 78.87 obs
	Sept. 4 th 1899

	No. 03 W between secs. 17 and 18. Ascend through scattered pines, cedars and mahogany.
5.25	Draw drains E.
20.26	Draw drains N & S.
25.48	Bottom of Whitmore's canon drains S E. 300 ft deep.
25.95	Center of Whitmore's creek 11 hrs wide about $\frac{1}{2}$ ins of water drains S E.
27.19	Wagon road. bears N W and S E.
32.44	Ascend over large rocks.
40.00	Set a sandstone 30 x 12 x 12 ins. 15 ins in the ground. In $\frac{1}{4}$ sec cor. marked $\frac{1}{4}$ in. N face and raised a mound of stone 2 ft base $\frac{1}{2}$ ft high W of corner. It is impracticable
72.81	Ridge bears E & W. 200 ft high.
73.11	Dry mud.
80.00	Set a sandstone 30 x 14 x 6 ins. 22 ins in the ground for cor. of secs. 7-8-17 & 18

Sub-division of T14 S R14 E

marked with 4 notches on S and 5 notches on E edges and raised a mound of stone 2 ft base $1\frac{1}{2}$ ft high W of cor.

It is impracticable to run which a pine tree 12 ins in diam bears $360^{\circ} 50' W$ 50 lbs dist. marked T14 S R14 E S 18 B.T.

A pine tree 10 ins in diam bears N $52^{\circ} 40' E$ 33 lbs dist marked T14 S R14 E S 8 B.T.

No other trees worth in bunches.

Land mountainous and rocky
Soil 2 to 4th rate

Timber pine, cedar vegetation grass
Mountainous land 8000 ft.

Sept 5th 1899,

S $89^{\circ} 50' E$ in a random line between
secs 8 and 17.

40.00 Set a lump $\frac{1}{4}$ sec cor.

80.06 Dotted off N & S. line 3 lbs. N
of corner of secs 8-9-16+17

Thence S. run $89^{\circ} 49' W$
in true line between secs. 8 & 17

Ascend through scattering pine and
mahogany timber

Point of ridge, 180 ft high
Along side of ledge, 10 ft high
brbs. S.W. 100 ft high

Descend.

3166 Gulch 22 lbs wide drains south
Ascend.

40.03 Set a yds sandstone $20 \times 14 \times 6$ ins. 15 ins
in the ground. for $\frac{1}{2}$ sec cor. marked
 $\frac{1}{2}$ in N face and raising a mound
of stone 2 ft. base $1\frac{1}{2}$ ft high N
of corner.

It is impracticable
over grazing land.

Subdivision of 8th Street

45.39	Gulch drains S.E. Dense pine timber begins.
49.10	Leave gulch pine thicker.
55.87	Top of ridge bears NE and SW 300 ft high
61.23	Descend.
- 80.06	Top cor of sec. 7-8 17-18 Land mountainous Soil 2 & 3 rate Timber pine cedar and quaking asp. Dense timber at 3.71 chrs. Mountainous land 80.06 chrs. Sept. 3-1899.

- 789' 50' W on a random line between
secs. 7 & 18
- 40.00 Set on a tiny $\frac{1}{4}$ acre cor.
- 78.59 Enter W bdry of sp 4 lks. N of
cor of secs 7-12-13 & 18.
There I run S 89° 51' E on trun
line between secs. 7 & 18
Through dense growth of quaking asp.
and underbrush.
- 10.48 Ridge bears. NE & SW. - Leave dense timber
descend.
- 38.59 Set a sandstone 24x7x4 ins. 18 ins in
the ground. on $\frac{1}{4}$ acre cor. marked
 $\frac{1}{4}$ on N face and raised a mound
of 3 ins. 2 ft base $\frac{1}{2}$ ft high N of corner
It is impracticable
- 45.34 Bottom of Whitmore cañon. drains
S.E. 360 ft deep.
- 44.98 Bend of creek. 8 lks wide 1 ins deep
drains S.E.
- 51.91 Waggon road bears N & S.
- 52.81 Descend.
- 57.32 Enter dense underbrush
- 60.65 Draw drains N.E.
- 74.18 Draw drains N.E.
Leave, dense underbrush.

Subdivision of T 14 S, R 1st E
Chs.

- 78.59 The cor of nos. 7-8-17 & 18
Land somewhat gneissous.
Soil 3rd and 4th rate.
Timber pine and quaking asp.
Dense timber and underbrush ab. 23,375 acs.
Mountainous land 7859 chs.
Sept 5th 1899
- 10.24 N° 03 W between nos 7 and 8.
Descend through scattered timber
Bottom of gulch 18 ft wide drains
west.
Circum over ledges.
- 40.00 Set a sandstone 16 x 8 x 5 ins. 12
ins in the ground. In 1/4 sec cor.
marked 4 on W face and raised
a mound of abu. 2 ft base 1/2 ft
high W of corner.
This impracticable
- 50.03 Ridge bears 78. 4th W 400 ft high
50.35 Discend.
Enter dense growth of quaking asp.
timber
- 75.32 Draw drains N.W. 200 ft dep.
Leave dense quaking asp. timber
Ascend.
- 80.00 Set a sandstone 20 x 12 x 6 ins 15 ins
in the ground. In. cor of nos. 5-6-7-8
marked with 3 notches in S. and
3 notches on E. edges, and raised
a mound of stone 1/2 ft base 1/2 ft
high W of corner.
This impracticable
No trees within 50 ft.
- Land rough mountainous.
Soil 2nd and 3rd rate.
Timber quaking asp. pine & cedar.
Dense timber ab. 24,47
Mountainous land 80,000 chs
Sept. 6th 1899

Subdivision of T 14 S. R 14 E

	N 89° 51' W on a random line between secs. 6 and 7.
40.00	Set a limb $\frac{1}{4}$ sec cor.
78.31	Intersect N bdy of Twp. 5 - the N of cor. of secs. 1-6-7 & 1/2 set by me and previously described.
3.08	Then I run S 89° 53' E on a true line between secs. 6 & 7. Creek 8 lbs. wide, $\frac{1}{2}$ sec. deep. drains S E. in Whitmores cañon, Wagon road bears NW & S E.
4.16	Ascend.
26.67	Ridge bears NW S. 350 ft high.
36.65	Descend.
36.87	Creek: 7 lbs. wide. drains S. into South Branch of Whitmores cañon. 300 ft. deep. 1/2 sec. wide. 2 sec. deep.
38.17	Wagon road bears N & S. 1/2 of Sect. 6 sandstone 16 x 7 x 5 ins. 12 lbs per cu. yd. ground for $\frac{1}{4}$ sec. cor. marked N face and sides of mountain of stone 1/2 ft bare 1/2 ft high. N of corner. Beds thin & calcareous. From which the quaking asp. grows in drain brass. S 78° 50' E 22.7 lbs. dist. marked. 1/4 37 B.T.
59.20	No other trees within limits. Ascend.
51.37	Enter denum quaking asp.
51.55	Ridge bears N & S. 200 ft high.
62.94	Descend.
75.00	Leave denum quaking asp.
78.31	Leave denum quaking asp. Ascend Drain drains NW The cor. of secs. 5-6-7 & 8 Laud, mountainous. Soil 2 m. & 3 ² rate. Timber quaking asp and pine Dense timber 23.74 lbs. Mountain overland 78.31 lbs. Sept 7 th 1894

Subdivision of T14 S.R. 14 E
Blk

79.00' W from random line
between secs. 5 & 6

- 40.00 Set a limb $\frac{1}{4}$ in. cpr.
79.98 Distinct $\frac{1}{4}$ ft. of sp. 2 lks w
of corner of secs. 5-6-31 & 32 ab
by you and previously described.
Turn N. from S of 63° E on a
true line between secs. 5 & 6.
5.02 Creek 4 lks wide, water very deep
Drains SW. In south fork of Whitman
Canyon.
5.49 Wagon road. bears. N E and SW
Draw drains W.
30.17 Ridge bears. E and W
30.44 Dipped.
36.23 Enter dense growth of quaking asp
timber
36.32 Draw drains SW
59.98 Set a sandstone 36x12x6 ins 2 $\frac{1}{2}$ ms
in the ground for $\frac{1}{4}$ sec. cor. marked
 $\frac{1}{4}$ m W face and raised a mound
of stone 2 ft. base $\frac{1}{2}$ ft. high W of
corner
Pits impracticable
45.35 Draw drains W
65.75 Draw dense growth of small
quaking asp.
67.90 Ridge bears E & W
68.27 Dipped.
-79.98 Try cor of secs. 5-6-7 & 8.
Land mountainous.
Soil 3rd and 4th rate.
Timber pine and quaking asp.
Large timber abt. 29-32 ins.
Mountainous land 79.98 ins.
Sept 7th 1884

Sub-division of T. 14 S. R. 14 E
Obs.

- On account of the rough rugged and precipitous nature of the country which is embraced within Secs. 5 & 6 - 8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 & 16. and is impracticable of surveying. I commence at the top of secs. 1, 6 - 7 - 12 on the E bdy. of the Sp. which is a sandstone set by me and herefor described. Hence I run west. between secs. 1 & 12 in true line.
- 2, 54 Enter dense growth of timber.
Described.
25. 00 Draw drains N.
31. 24 Argued.
40. 00 Set a sandstone 12 x 10 x 6 ins. 8 ins. in the ground. for 1/4 ac. cor. marked 1/4 sp. N face and raised a mound of stone 2 ft base 1/2 ft high N of corner.
This is impracticable. From which a Quaking asp tree 10 ins in diam has N 88° 20' E 1/48. lks. dirt marked 1/4 S 1 B.T.
- No other tree within limits
42. 85 Draw drains N 8° 50' E.
Leave dense timber.
44. 21 Enter scattered brush and quaking asp timber
- 80. 00 Set a sandstone 14 x 12 x 4 ins. 9 ins. in the ground. for cor. of secs. 1-2-11 & 12 marked with 1 notch in E and 5 notches on S edges and raised a mound of stone 2 ft base 1/2 ft high N of corner.
This is impracticable. From which a Quaking asp tree 10 ins in diam has S 29° 30' E 65, 1. lks. dirt marked T 14 S R 14 E S 12 B.T.

Subdivision of T, 4 S R 14 E

C. L.

A quaking asp 10 ins in diam bears
 N $70^{\circ} 40' W$ 17.7 lbs. dist marked
 T. 14 S R 14 E S 2 Bg T.
 No other trees within limits.
 Land - mountainous.
 Soil 2nd & 4th rate.
 Timber quaking asp and pine.
 Dense timber abt. 40.31 chs.
 Mountainous land 80.00 chs.
 Sept 9th 1884.

- 70001W on a random tree between
 sec 1 and 2
 40.00 Set temp $\frac{1}{4}$ sec cor.
 80.03 In interior N side of Sp. 2 lbs 2
 of 100. of sec. 1-2-35+36. set by me
 Plumb line described.
 Height. I run 8.00ft E on true
 line between sec 1 & 2.
 Ascend through dense timber
 Top of ridge bears N $18^{\circ} E$ & $318^{\circ} W$
 100 ft high.
 9.17 Descend.
 18.20 Draw drains $N 60^{\circ} E$
 Ascend.
 32.14 Top of ridge bears. N $24^{\circ} E$ & $S 24^{\circ} W$
 350 ft high.
 Dense dense timber
 Descend.
 40.03 Set of sandstone 16 x 12 x 5 ins 12 ins
 in the ground. In $\frac{1}{4}$ sec cor. marked
 $\frac{1}{4}$ on W face and raised a round
 of stone 2 ft base $\frac{1}{2}$ ft high W of
 corner.
 This impracticable from which
 A quaking asp tree 10 ins in diam
 bears. S $26^{\circ} 30' W$ 66 lbs dist marked
 14 S 2 Bg T.
 No other trees within limits.
 Enter dense growth of timber
 42.40

Subdivision of 5th S.R. 14 E
Colo.

51.36	Draw drains E.
61.79	Draw drains E.
63.82	Leave draw timber
- 80.0	The ground has 1/2 to 1/4 slope. Land mountainous Soil 3 ¹ / ₂ to 4 ¹ / ₂ feet late. Timber quaking asp. sparse. Dense timber at 53.56 elev. Mountainous land 80.03 elev.
	Sept. 9 th 1899.
28.91	West between elev. 2 & 11. through scattered quaking asp., across broad ridge. Ascend.
40.00	Set a sandstone 15 x 10 x 4 in. x 1.0 in. in the ground. for 1/4 sec cor marked 1/1 on N face and raised a round of stone 2 ft from 1/2 ft high N of corner. This impracticable. From which a quaking asp tree 6 in. in diam bears N 33° W 24.2 lbs dist marked 1/1 32 B 5
	A quaking asp tree 6 in. in diam. bears S 39° 20' E 26.7 lbs dist marked 1/1 51 B 5
49.66	Main canon Range Creek 9 lbs wide. drains S 24° E 400 ft dep. Trail in creek bed. bears S 24 E + N 24 W Ascend
55.01	Enter dense timber
- 80.00	Draw 7 lbs wide. drains. N 76° E Set a sandstone 30 x 14 x 8 in. 2.2 in. in the ground. for cor of gash 2 - 3 - 10 & 11 marked. with 5 notches in S and 2 notches in E edge & raised a round of stone 2 ft from 1/2 ft high N of cor. From which a quaking asp tree 12 in. in diam

Subdivision of T 14 S R 14 E
Lands

secs 7 & 45° 26' E 32.5 lbs. dirt marked
T 14 S R 14 E S 12 B. T.
A Balsam tree 8 ins in diam. trees
S 14 0 50' E 22.7 lbs dirt marked
T 14 S. R 14 E S 11 B. T.

A quaking asp tree 10 ins in diam.
trees. S 15° 20' W 31 lbs dirt marked.
T 14 S R 14 E S 10 B. T.

No other trees within limits.

Land mountainous

Soil 3¹/₂ to 4¹/₂ feet.

Timber pine-quaking asp & balsam.

Dense timber at 03034 chs.

Mountainous land 80.00 chs.

Sept. 10 - 1899

7.00 01 W in a random line between
secs. 2 and 3

40.00 Sit a knoll $\frac{1}{4}$ sec cor.

19.91 Intersect 20 ft. by 30 ft. 8 lbs
west of corner of secs. 2-3-34 & 35
but none described.

Thinner 10 ins S 8° 2' W on
true line between secs. 2 & 3
Described.

14.74 Point in Range Canon. 30 lbs wide
200 ft. deep drains S. E.

Dry creek bed from Pinnacle spring
drains S. E.

Pinnacle spring 45 lbs. to east of point.
It is 3 ft. in diam. and 1 ft. deep of
prine water.

16.24 Enter dense timber.

39.91 Sit at 2 and stone 18 x 12 x 12 ins
12 ins in the ground. for $\frac{1}{4}$ sec cor.
marked $\frac{1}{4}$ in W face and against
a mound of stone 2 ft base $1\frac{1}{2}$
ft high. W of corner.

A rock impervious. From which
a quaking asp tree 8 ins in diam

Subdivision of T. 14 S R. 14 E

	bears. N 52° 50' W 17.3 lbs. dish marked 1/4 33 P.T.
	A quaking asp tree 6 ins in diam beads. 344030° E 12 lbs. dish marked 1/4 3 1 P.T.
42.97	Drew 22 lbs wide. drains N 75° E
75.97	Drew 18 lbs. wide. drains N 60° E
79.91	The cap of nos. 2 + 3 = 10 ft. Land mountainous. Soil 3 in. and 3 in. slate Timber from quaking asp. Dense timber. 63.6 ft. elev. Mountainous land 79.91 elev. Sept. 10 th 1899.

	Went in a true line between nos. 3 and 10. through many timber of pine and quaking asp on hillside slopes N.
5.97	Drew drains. N E
14.95	Leave dense timber
20.50	Top of Patinas ridge. bears N 13° 50' W and S 13° 50' E elevation about 9800 ft above sea level.
20.60	Descend.
35.56	Enter scattering timber.
- 40.00	Asphalt ledge 22 lbs high. Set a sandstone, 16 x 12 x 8 ins 12 ins in the ground on 1/4 rec cov. marked 1/4 in. off face and raised around 1/4 stone. 2 ft base 1/2 ft high. B of cov.
	It's impracticable from which A pine tree 7 ins in diam bears. S 54° 10' E 68.8 lbs dish marked 1/4 3 10 P.T.
	My other trip within limits. Survey on this line discontinued on account of steep and rough character of country. Impracticable

Subdivision of T. 14 S. R. 14 E.
Sec. 11

of surveying.

Land mountainous.
Soil 1st and 4th rate.

Timber pine and quaking asp.

Dense timber, at 1495' abs.

Mountainous land 4000' abs.

Sept. 11th 1899.

From the corner of secs. 3-4-33-4 32⁴

on N. Bdy. of Sp. previously described

Turn S. 0° 0' E on a true line

between secs 3 & 4.

9,07

Run of mountain bears E & W

Enter scattered pine and quaking
asp timber.

34,94

Asphalt deposits and ledges

Descend over cliff face N.E. S.W.

38,39

Draw 7 lbs wide diam. 865' W

- 40,00

Set of sandstone 24x12x8 ins 18 ins
in the ground. In $\frac{1}{4}$ sec cor. marked
 $\frac{1}{2}$ ft face and raised a mound
of stone 2 ft face $\frac{1}{2}$ ft high at
the corner.

It is impracticable from which
a pine tree 12 ins in diam.

bears S 56° 5' W 35.7 lbs dirt marked

$\frac{1}{4}$ 34 13.7

$\frac{1}{4}$ A pine tree 10 ins, in dead trees.

S 54° 10' E 3.0 lbs. dirt. marked

$\frac{1}{4}$ 33 B.T.

Survey on this line, dirt continued
on account of the precipices and
rough character of the country.

Making further survey impracticable
land mountainous.

Soil 1st and 4th rate.

Timber pine and quaking asp.

Mountainous land 4000' abs.

Sept. 11th 1899

Subdivision of T 14 S R 14 E.

"General Description"
The portion of this township covered by this survey is all mountainous land, and in some places very rough and broken. The elevation of this country ranges all the way from 6500 ft. in the SW cor of sec 32, to between 9000 & 10000 ft. along the Potrero ridge in secs. 3-23-~~4~~⁴-35.

The formation of the country is sandstone where on all the west and south slopes it is broken into precipitous cliffs, ledges and is mostly very steep, covered in some cases with large quantities of talus rock. On nearly all the East and north slopes the sandstone has been eroded into very productive soil, which in most cases is covered with fine grazing grass, and with some dense timber of good size.

Thus north and east slopes together with the mesas of secs 18-19 & 30 & 35 furnish excellent pasture during the spring summer and fall.

The soil in the bottom of the canons, is generally of a sandy loam, and very fertile and only those portions can be cultivated.

There are no quarries with the exception of a few, and they are open indications of mineral, other than coal, asphaltum and bitumen of the Hydrocarbon series. From prospect development work performed in sec 32, a fair sized vein of coal has been uncovered, and fair indications and outcrops would consider the following sections to be coal lands, Secs. 27-28-29-30
32-33-~~4~~⁴-35.

Subdivision of Twp R 14 C
Sec.

no. 32

no. 33

The following are the only improvements
of settlers which we have been able
to note situated in this Township
and all in the E $\frac{1}{2}$ of the S W $\frac{1}{4}$ of
Sec 32.

A log cabin claimed by J. R. Tidwell
Value about $\$100.00$

A log cabin and out houses claimed by
Joseph Tidwell

Value about $\$100.00$

Wooden house with shed base

claimed by R. A. Kister

Value about $\$100.00$

There was found no trace of Desert entry
No. 1182. W. H. & Sollomon claimants
is said to be situated in Sec 3

There was found no trace of Desert entry
No. 2010. W. B. Call claimant.

Frank Anderson.

Wiley H. Ware.

U.S. Dep. Surveyors

No officer authorized to administer oaths
other than myself being available
without great inconvenience, delay
and expense I administer the
required preliminary and final oaths,

Frank Anderson
U.S. Dep. Surveyor.

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FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Frank Anderson & Wiley H. Hale, United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of the subdivision lines of Township No. 14 South of Range No. 14 East of the Salt Lake Base and Meridian in the State of Utah, showing the respective capacities in which they acted:

Clifton Draper, Chairman.
Eyraud Hippolyt, Chairman.
Pat Anderson, Moundman.
Geo. N. Hill, Moundman..
Scott Westfall, Axman.
Harmon Chander, Axman.
Milo Cuplin, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Frank Anderson & Wiley H. Hale,

United States Deputy Surveyor, in surveying all those parts or portions of the subdivision lines of Township No. 14 South of Range No. 14 East.

of the Salt Lake base and meridian, in the state of Utah, which are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor General for Utah.

Clifton Draper, Chairman.
Eyraud Hippolyt, Chairman.
Pat Anderson, Moundman.
Geo. N. Hill, Moundman.
Scott Westfall, Axman.
Harmon Chander, Axman.
Milo Cuplin, Flagman.

Subscribed and sworn to before me this 14
day of September, 1899 }



Frank Anderson
U.S. Deputy Surveyor

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

On Frank Anderson ^{and} Wiley H. Ware, United States Deputy Surveyors do solemnly swear that, in pursuance of a contract received from Jacob W. Blair, United States Surveyor General for The District of Utah, bearing date of the 30^t day of September, 1899, we have well, faithfully, and truly, in our own proper persons and in strict conformity with the instructions furnished by the United States Surveyor General for The District of Utah, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of The Subdivisions of Township
14-415 South Range 14 East.

Base and meridian in the State of Utah, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and we further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for The District of Utah and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey; and should any fraud be detected, we will suffer the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

Wiley H. Ware

Frank Anderson

United States Deputy Surveyor.

Subscribed by said Frank Anderson, and sworn to before me,

this 18^t day of December, 1899



Jacob T. Blair
United States Surveyor General for Utah

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah May 5th 1900

The foregoing field notes of the survey of The Subdivisions of Township
14-415 South Range 14 East of the Salt Lake Base & Meridian
Utah

executed by Frank Anderson ^{and} Wiley H. Ware
under his contract No. 292, dated September 30th, 1899, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Jacob T. Blair

United States Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in _____, has been correctly copied from the original notes on file in this office.

United States Surveyor General.